```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 s
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Minimum DB seq length: Maximum DB seq length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Run
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OM nucleic -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0n ::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                  3451
1192.2
1192.2
1192.2
1192.2
1192.2
          642
639.8
639.8
1182.2
1182.2
1182.2
1182.2
1180.6
1180.6
1180.6
1180.6
1180.6
1180.6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Issued_Patents_NA:*

1: /cgn2_6/ptodata/2,

2: /cgn2_6/ptodata/2,

3: /cgn2_6/ptodata/2,

4: /cgn2_6/ptodata/2,

5: /cgn2_6/ptodata/2,

6: /cgn2_6/ptodata/2,
                                                                                                                                                                                                                                                                                                                                                                                                                         Query
                                                                                                                                                                                            100.0
87.1
87.1
87.1
87.1
30.1
30.1
30.1
30.1
16.2
16.2
16.1
4.6
                                                                                                                                                                                                                                                                                                                                                                                                           Match Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IDENTITY_NUC | ( Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                351203 seqs, 113238999 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 CGGGCCTGAGACTGGGGTGA...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-08-153-397A-1
3962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         December 8, 2001, 19:38:26;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GenCore version 4.5 Copyright (c) 1993 - 2000 Compugen Ltd
                                       /cgn2_6/ptodata/2/ina/5A_COMB.seq:*
/cgn2_6/ptodata/2/ina/5B_COMB.seq:*
/cgn2_6/ptodata/2/ina/6A_COMB.seq:*
/cgn2_6/ptodata/2/ina/6B_COMB.seq:*
/cgn2_6/ptodata/2/ina/BCTUS_COMB.seq:*
/cgn2_6/ptodata/2/ina/backfiles1.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20000000000
                                    1197
1197
1197
3157
3157
3120
3120
2820
2820
2820
2823
2823
2823
3060
3060
3194
                                                                                                                                                                                                                                                                                                                                                                                                           B
                                             US-08-286-305A-4
US-08-441-104A-4
US-08-440-816A-4
US-09-417-381A-4
US-08-306-691B-23
PCT-US93-06251-78
US-08-286-305A-6
US-08-441-104A-6
US-08-441-104A-6
US-08-441-381A-6
US-08-359-705B-1
                                                                                                                                                                                                      US-08-336-343A-3
US-08-336-343A-5
US-08-456-647B-19
US-08-237-401A-19
                                                                                                                                                                                                                                                                                                       US-08-170-558-3

US-08-447-314-3

US-08-445-461-3

US-08-445-640-7
                                                                                                                                                                                                                                                                                                                                                               US-08-336-343A-1
US-08-445-640-3
                                                                                                                                                                                                                                                                US-08-447-314-7
US-08-445-461-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                     SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ....AAAAAAAAAAACCGGAATTC 3962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Search time 70.08 Seconds (without alignments) 12804.022 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     702406
Sequence 1, Appli
Sequence 3, Appli
Sequence 3, Appli
Sequence 3, Appli
Sequence 7, Appli
Sequence 7, Appli
Sequence 7, Appli
Sequence 7, Appli
Sequence 5, Appli
Sequence 19, Appli
Sequence 19, Appli
Sequence 4, Appli
Sequence 4, Appli
Sequence 4, Appli
Sequence 4, Appli
Sequence 6, Appli
Sequence 1, Appli
                                                                                                                                                                                                                                                                                                                                                                                                       Description
Query Match
Best Local Similarity
```

45	44	43	42	41	40	39	38	37	36	ω U	ω 4-	u	32	ω	30	29	28
130.4	135.2	138.4	139	139	139	147.2	158	163	178.6	178.6	178.6	178.6	178.6	180.6	180.6	180.6	180.6
ω ω	3.4	3 5	3.5	3 5	ω .5	3.7	4.0	4.1	5	5	5		4.5	4.6	4.6	4.6	4.6
2869	4149	2376	2604	2580	2208	3398	4092	2463	2940	2940	2940	2940	2526	3707	3707	3194	3194
_	2	ب	<u>ب</u>	ίπ	ហ	ຫ	N	—	4	N	N	٢	_	ഗ	_	w	ω
US-08-374-834-2	US-08-737-715-1	US-07-912-952-3	PCT-US95-08493-20	PCT-US95-08493-18	PCT-US95-08493-1	PCT-US95-08493-12	US-08-469-537A-106	US-08-339-578-1	US-09-417-381A-8	US-08-440-816A-8	US-08-441-104A-8	US-08-286-305A-8	US-07-912-952-1	PCT-US95-08180-1	US-08-271-454-1	US-09-156-923-1	US-08-942-562-1
Sequence 2, Appli	۲,			18	۲		100	1	ω,	ω,	Sequence 8, Appl1	Sequence 8, Appli	1,	Sequence 1, Appli	Sequence 1, Appli	Sequence 1, Appli	Sequence 1, Appli

ALIGNMENTS

			US-08-336-343A-1	Q ·· ·
			SE: NC	٠.
			HYPOTHETICAL: NO	
			Ę	
			; STRANDEDNESS: double	٠.
			nuclei	٠.
			••	
			SEQUENCE CHARACTERISTICS:	
			TO THE TEXT OF THE TO NO. 1.	· • •-
			; TELEFAX: (212) 869-9741/8864	٠.
			; TELEPHONE: (212) 790-9090	٠.
			ION:	٠.
			E C	
			-	٠
			NAME: Coruzzi Laura A	
			ATTORNEY/AGENT INFORMATION:	
			: PITING DAME: OB-NOV-100/	
			CURRENT APPLICATION DATA:	
		#1.30	SOFTWARE: PatentIn Release #1.0, Version	٠.
			ໝ	٠.
			; COMPUTER: IBM PC compatible	٠.
,			TYPE: F1	٠.
			Ħ	٠.
				٠
			ĸ	
			: STATE: New YORK	
			EE: Pennie & Edmonds	
		٠.	; CORRESPONDENCE ADDRESS:	٠.
			: 43	٠.
Kinase	Tyrosine	Receptor	NVENTION	
			: APPLICANT: Alves Franke	
			5677144	
			; Sequence 1, Application US/08336343A	
			US-08-336-343A-1	_
			RESULT 1	

100.0%;

Score 3962; Pred. No. 0;

DB 1;

Length 3962;

	Qy 1 Db 1	pb Qy	Qу	Qy Db	P &	64	Qy db	Qy Db	Db Qy	g 4	95 64	ОУ	ОУ	Qy Db	Db Qy	dd Vo	D 04	Mat Qy Db
	1021 GTGTGGTGGGCTGGATGACTTTAGGAAGAGTCAGGAGCTGCGGGTCTGGCCAGGCTATG 1080	961 CCTATGACGGACATACCGTGGGCGGACTGCAGTATGGGGGTCTGGGCCAGCTGGCAGATG 1020 	901 ACACCGCCCTGTGGGGCAGACAATGTATTTATCTGAGGCCGTGTACCTCAACGACTCCA 960 	841 TGAGTGTCTGTCTGCGGGTAGAGCTCTATGGCTGCCTCTGGAGGGATGGACTCCTGTCTT 900	781 ACCTTGGGCCCCCCATGGTTGCCCGACTGGTTCGCTTCTACCCCCGGGCTGACCGGGTCA 840	7	661 TCTCCCGGAGCTACCGGCTGCGTTACTCCCGGGATGGTCGCCGCTGGATGGGCTGGAAGG 720	601 TCCACCTGGTGGCTCTGGTGGGCACCCAGGGACGGCATGCCGGGGGGCCTGGGCAAGGAGT 660	541 GCCCCGCAGGGTCGGTGTTTCCCAAGGAGGAGGAGTACTTGCAGGTGGATCTACAACGAC 600 	481 CAGATTCCACTGCCGCCCCCCCACAGCAGGTTGGAGAGCAGTGACGGGGATGGGGCCTGGT 540	421 CCCTGGGCATGCAGGACCGGACCATCCCAGACAGTGACATCTCTGCTTGCT	361 TGGTGGCAAGTGGAGATGCTGACATGAAGGGACATTTTGATCCTGCCAAGTGCCGCTATG 420 	301 GGCCCGAGGGATCAGGAGCTATGGGACCAGAGGCCCTGTCATCTTTACTGCTGCTGCTCT 360	241 TCACTGAGCGATGGGGTTGGACTTGAAGGAATGCCAAGAGATGCTGCCCCACCCCCTTA 300	181 CCCGGGTCGGACGCCTGGGTCTGCCGGGAAGAGCGATGAGAGGTGTCTGAAGGTGGCTAT 240	121 CCGGCTCCTGGCTCCGCCTCCGCCCCGCCCCTCGCCCCGCCG	61 CTGCTCTCGGGAGCCGCCTCCCGACACCCGAGCCCGCCGCGCGCCTCCCGGCTCCCGGCTC 120	tches 3962; Conservative 0; Mismatches 0; Indels 0; Gaps 1 CGGGCCTGAGACTGGGGTGACTGGGACCTAAGAGAATCCTGAGCTGGAGGCCCCCGACAG 60
																		0;
				- · · ·	-	,												· · · ·
٠	D Qy	B Qy	Db Qy	g Q	gg Qy	Db Qy	B 8	Оу	y da	Db Qy	р 6	Db dg	d do	B 6	dg Qy	da Vo	B 5	ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο
	2101 GGCAGTCGGGGATGGGCCCCCAGAGTGGATTTCCCTCGATCTCGACTCCGCTTCAAGG	204	19	·											0 ~	0 ~	0 ~	

Вb

oy

0y 0y 0y 0b

```
3121
                                                              3121
                                                                             3061
                                                                                           3061
                                                                                                           3001
                                                                                                                          3001
                                                                                                                                         2941
                                                                                                                                                        2941
                                                                                                                                                                       2881
                                                                                                                                                                                      2881
                                                                                                                                                                                                     2821
                                                                                                                                                                                                                    2821
                                                                                                                                                                                                                                                                 2701
                                                                                                                                                                                                                                                                                2701
                                                                                                                                                                                                                                                                                                                                                                                         2461
                                                                                                                                                                                                                                                                                                                                                                                                                        2401
                                                                                                                                                                                                                                                                                                                                                                                                                                      2401
                                                                                                                                                                                                                                                                                                                                                                                                                                                      2341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2161
              GGAGCCGGGAGTCTGAGCAGCGACCACCCTTTTCCCAGCTGCATCGGTTCCTGGCAGAGG
                                                                                                                                    TCACCGACGAGCAGGTCATCGAGAACGCGGGGGAGTTCTTCCGGGACCAGGGCCGGCAGG
                                                                                                                                                                                                CCTTTGGTGTGACCCTGTGGGAGGTGCTGATGCTCTGTAGGGCCCAGCCCTTTGGGCAGC
                                                                                                                                                                                                                              GCCGGAACCTCTATGCTGGGGACTATTACCGTGTGCAGGGCCGGGCAGTGCTGCCCATCC
CCACGCGGAACTGCCTAGTTGGGGAAAATTTCACCATCAAAATCGCAGACTTTGGCATGA
                                                                                                                                                                                                                                                                                                                        CCCAGATCGCCTCCGGCATGCGCTATCTGGCCACACTCAACTTTGTACATCGGGACCTGG
                                                                                                                                                                                                                                                                                                                                                      GGGACGGGCAGGCTGCGCAGGGGCCCACCATCAGCTACCCAATGCTGCTGCATGTGGCAG
                                                                                                                                                                                                                                                                                                                                                                                     ACCTCAACCAGTTCCTCAGTGCCCACCAGCTGGAGGACAAGGCAGCGGGGCCCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                    TGGGCGTGTGTGCAGGACGACCCCCTCTGCATGATTACTGACTACATGGAGAACGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                            TGGGCGTGTGTGTGCAGGACGACCCCCTCTGCATGATTACTGACTACATGGAGAACGGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCAAGATCTTACGGCCAGATGCCACCAAGAATGCCAGCTTCTCCTTGTTCTCCAGGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTTCCTGAAAGAGGTGAAGATCATGTCGAGGCTCAAGGACCCCAACATCATTCGGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGAAGCTTGGCGACGGCCAGTTTGGGGAGGTGCACCTGTGTGAGGTCGACAGCCCTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTTCCTGAAAGAGGTGAAGATCATGTCGAGGCTCAAGGACCCCAACATCATTCGGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATCTGGTCAGTCTTGATTTCCCCCTTAATGTGCGTAAGGGACACCCTTTGCTGGTAGCTG
                              3240
                                                           3180
               3240
                                                                          3120
                                                                                                        3060
                                                                                                                      3060
                                                                                                                                      3000
                                                                                                                                                    3000
                                                                                                                                                                   2940
                                                                                                                                                                                  2940
                                                                                                                                                                                                 2880
                                                                                                                                                                                                                2880
                                                                                                                                                                                                                                                                             2760
                                                                                                                                                                                                                                                                                                          2700
                                                                                                                                                                                                                               2820
                                                                                                                                                                                                                                                             2760
                                                                                                                                                                                                                                                                                            2700
                                                                                                                                                                                                                                                                                                                          2640
                                                                                                                                                                                                                                                                                                                                         2640
                                                                                                                                                                                                                                                                                                                                                       2580
                                                                                                                                                                                                                                                                                                                                                                      2580
                                                                                                                                                                                                                                                                                                                                                                                      2520
                                                                                                                                                                                                                                                                                                                                                                                                    2520
                                                                                                                                                                                                                                                                                                                                                                                                                   2460
                                                                                                                                                                                                                                                                                                                                                                                                                                  2460
                                                                                                                                                                                                                                                                                                                                                                                                                                                  2400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                2400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2220
                                                                                                                                                                                                       밁
                                                                                                                                                                                                                   ρy
                                                                                                                                                                                                                                      Ъ
                                                                                                                                                                                                                                                   Š
                                                                                                                                                                                                                                                                                                  皮
                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                Ωy
                                                                                                                                                                                                                                                                                                                Qγ
                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                             Qy
                                                                                                                                                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                                                                                                                           Qγ
                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                          Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                        Š
                                                                                                                                                                                                                                                                                                                                                                                                                         멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ğ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ğ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                        3961
                                                                                                                                                                           3961
                                                                                                                                                                                                       3901
                                                                                                                                                                                                                      3901
                                                                                                                                                                                                                                      3841
                                                                                                                                                                                                                                                     3841
                                                                                                                                                                                                                                                                    3781
                                                                                                                                                                                                                                                                                  3781
                                                                                                                                                                                                                                                                                                  3721
                                                                                                                                                                                                                                                                                                                3721
                                                                                                                                                                                                                                                                                                                               3661
                                                                                                                                                                                                                                                                                                                                               3661
                                                                                                                                                                                                                                                                                                                                                              3601
                                                                                                                                                                                                                                                                                                                                                                            3601
                                                                                                                                                                                                                                                                                                                                                                                           3541
                                                                                                                                                                                                                                                                                                                                                                                                          3541
                                                                                                                                                                                                                                                                                                                                                                                                                         3481
                                                                                                                                                                                                                                                                                                                                                                                                                                         3481
                                                                                                                                                                                                                                                                                                                                                                                                                                                        3421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3301
```

```
3241
片드
                          GGAGAGACACAGATTTTACACTAATATATGGACCTAGCTTGAGGCAATTTTAATCCCCT
                                                                                   TCTAGTGTAGCTGCCACATTGATTTTTCTATAATCACTTGGGGTTTGTACATTTTTGGGG
                                                                                                               CCACTTCCCACTTGCAGTCTTGTAGCTAGAACTTCTCTAAGCCTATACGTTTCTGTGGAG
                                                                                                                                                                        CTCCTCCATCACCTGAAACACTGGACCTGGGGGTAGCCCCGCCCCAGCCCTCAGTCACCC
                                                                                                                                                                                                    TCTCTCCCTGTCACACACTGGACCCCACTGGCTGAGAATCTGGGGGTGAGGAGGACAAGA
                                                                                                                                                                                                                                                             AGCCATCCCTTGGGGAAGGGTGGGGAGAAATATAGGATAGACACTGGACATGGCCCATTG
                                                                                                                                                                                                                                                                                                                      3962
             3962
                           3960
                                                                                                                3780
                                                                                                                                           3720
                                                                                   3840
                                                                                                                                                                         3660
                                                                                                                                                                                      3660
                                                                                                                                                                                                     3600
                                                                                                                                                                                                                    3600
                                                                                                                                                                                                                                  3540
                                                                                                                                                                                                                                                3540
                                                                                                                                                                                                                                                                                                                                     3360
                                                                                                                                                                                                                                                              3480
                                                                                                                                                                                                                                                                                           3420
```

RESULT 2
US-08-445-640-3
; Sequence 3, Application US/08445640
; Patent No. 5709858
; GENERAL INFORMATION:
; APPLICANT: Godowski, Paul J.
; APPLICANT: Mark, Melanie R.
; APPLICANT: Baron, Well F.
; APPLICANT: Baker, Kevin P.
; APPLICANT: Baron, Will F.
TITLE OF INVENTION: Protein Tyrosine Kinases
NUMBER OF SEQUENCES: 35
CORRESPONDENCE ADDRESS:
ADDRESSEE: Genentech, Inc.
STREET: 460 Point San Bruno Blvd
COUNTRY: South San Francisco
STATE: California
COUNTRY: USA
ZIP: 94080
COMPUTER READABLE FORM:
MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk

Ş В 20 Вþ Ş В δ 밁 Ş 밁 δÃ В δÃ 밁 δÃ В δÃ B δÃ В ρy Вb δÃ В Qy 멍 Š 멍 Q В

```
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415/25-1896
TELEFAX: 415/952-9881
TELEX: 910/371-7168
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 3637 bases
TYPE: nucleic acid
STRANDEDNESS: Single
TOPOLOGY: linear
US-08-445-640-3
                                                         Š
                                          문
                                                                                밁
                                                                                                Ş
                                                                                                                      밁
                                                                                                                                        Ş
                                                                                                                                                             밁
                                                                                                                                                                              Š
                                                                                                                                                                                                     밁
                                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                        뭥
                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                           Ω¥
                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 87.1%;
Best Local Similarity 97.0%;
Matches 3589; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: patin (Genentech) CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/445,6 FILING DATE: 2-MAY-1995 CLASSIFICATION: 435 PRIOR APPLICATION DATA: APPLICATION NUMBER: 08/170558 FILING DATE: 20-DEC-1993 PRIOR APPLICATION NUMBER: 08/157563 PRIOR APPLICATION NUMBER: 08/157563 PILING DATE: 23-NOV-1993 ATTORNEY/AGENT INFORMATION: NAME: Hasak, Janet E. REGISTRATION NUMBER: 28.616 REFERENCE/COUCET NUMBER: 28.616
                                          497
                      796
                                                              736
                                                                                 437
                                                                                                    676
                                                                                                                        377
                                                                                                                                           616
                                                                                                                                                              317
                                                                                                                                                                                   556
                                                                                                                                                                                                                         496
                                                                                                                                                                                                     257
                                                                                                                                                                                                                                            197
                                                                                                                                                                                                                                                               436
                                                                                                                                                                                                                                                                                   137
                                                                                                                                                                                                                                                                                                     376
                                                                                                                                                                                                                                                                                                                                                                                   256
                                                                                                                                                                                                                                                                                                                         77
                                                                                                                                                                                                                                                                                                                                                                17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REGISTRATION NUMBER: 28,616
REFERENCE/DOCKET NUMBER: 854C2
GTTGGACTTGAAGGAATGCCAAGAGATGCTGCCCCCACCCCCTTAGGCCCCGAGGGATCAG 315
                                     AGGTGATCTCAGGCAATGAGGACCCTGAGGGAGTGGTGCTGAAGGACCTTGGGCCCCCCA
                                                                           GGCTGCGTTACTCCCGGGATGGTCGCCGCTGGATGGCTGGAAGGACCGCTGGGGTCAGG
                                                                                                                                                          TGTTTCCCAAGGAGGAGGAGTACTTGCAGGTGGATCTACAACGACTCCACCTGGTGGCTC
                                                                                                                  TGGTGGGCACCCAGGGACGGCATGCCGGGGGCCTGGGCAAGGAGTTCTCCCGGAGCTACC
                                                                                                                                                                                                           CCCGCCACAGCAGGTTGGAGAGCAGTGACGGGGATGGGGCCTGGTGCCCCGCAGGGTCGG
                                                                                                                                                                                                                                                                                                                    CCCGCCACAGCAGGTTGGAGAGCAGTGACGGGGATGGGGCCCTGGTGCCCCCGCAGGGTCGG
                                                                                                                                                                                                                                        ACCGGACCATCCCAGACAGTGACATCTCTGCTTCCAGCTCCTGGTCAGATTCCACTGCCG
                                                                                                                                                                                                                                                  ACCGGACCATCCCAGACAGTGACATCTCTGCTTCCCAGCTCCTGGTCAGATTCCACTGCCG
                                                                                                                                                                                                                                                                                          ATGCTGACATGAAGGGACATTTTGATCCTGCCAAGTGCCGCTATGCCCTGGGCATGCAGG
                                                                                                                                                                                                                                                                                ATGCTGACATGAAGGGACATTTTGATCCTGCCAAGTGCCGCTATGCCCTGGGCATGCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US/08/445,640
                                                                                                                                                                                                                                                                                                                                                                                                    0,
                                                                                                                                                                                                                                                                                                                                                                                                   Score 3451; D: Pred. No. 0; O: Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                       DB
                                                                                                                                                                                                                                                                                                                                                                                                                      ۲
                                                                                                                                                                                                                                                                                                                                                                                                    <u>ب</u>
                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                   105;
                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                             615
 616
                   855
                                       556
                                                        795
                                                                             496
                                                                                                                    436
                                                                                                                                       675
                                                                                                                                                                                                                      555
                                                                                                                                                           376
                                                                                                                                                                                                  316
                                                                                                                                                                                                                                        256
                                                                                                                                                                                                                                                                               196
                        δÃ
         8
                                            B
                                                                δÃ
                                                                                     밁
                                                                                                       Q
                                                                                                                            밁
                                                                                                                                             δÃ
                                                                                                                                                                   밁
                                                                                                                                                                                   δÃ
                                                                                                                                                                                                         Вþ
                                                                                                                                                                                                                           δÃ
                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                Q
                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                        δÃ
                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                   ₽
                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                           Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       . В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Š
         1637
                           1876
                                                                                    1517
                                                                                                                             1457
                                                                                                                                                                    1397
                                                                                                                                                                                                                                                                   1516
                                                                                                                                                1696
                                                                                                                                                                                       1636
                                                                                                                                                                                                          1337
                                                                                                                                                                                                                                                  1277
                                                                                                                                                                                                                                                                                        1217
                                                                                                                                                                                                                                                                                                           1456
                                                                                                                                                                                                                                                                                                                              1157
                                                                                                                                                                                                                                                                                                                                                 1396
                                                                                                                                                                                                                                                                                                                                                                    1097
                                                                                                                                                                                                                                                                                                                                                                                        1336
                                                                                                                                                                                                                                                                                                                                                                                                           1037
                                                                                                                                                                                                                                                                                                                                                                                                                              1276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1036
                                                                                                                                                                                                                                                                                                                                                                                                                                                 977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          617
     CTTACGCCCGTCCCCCTCGAGGCCCGGGCCCCCCCACACCCCGCCTGGGCCAAACCCACCACACCCTTACGCCCGTCCCCTCGAGGCCCGGGCCCCACACCCCGCCTGGGCCAAACCCCACCA
                                            GAGAGCCACCCCCGTACCAGGAGCCCCGGCCTCGTGGGAATCCGCCCACTCCGCTCCCT
                                                                                                                          TGACGGTTCACCTCTGTGCCCTGGGGACACTATCCTCATCAACAACCGCCCAGGTCCTA
                                                                                                                                                               AGCTGGAGCCCAGAGGCCAGCAGCCCGTGGCCAAGGCCGAGGGGAGCCCGACCGCCATCC
                                                                                                                                                                                                                                                                                               CCTTCCCGCCAGCCCCCTGGTGGCCGCCTGGCCCACCTCCCACCACCTTCAGCAGCTTGG
                                                                                                                                                                                                                                                                                                                         GCGGCCGTGTGGCTCGCTTTCTGCAGTGCCGCTTCCTCTTTGCGGGGGCCCTGGTTACTCT
                                                                                                                                                                                                                                                                                                                                                                                                       CCTTCCAGGCTATGCAGGTCCACTGTAACAACATGCACACGCTGGGAGCCCGTCTGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCGTGGGCGGACTGCAGTATGGGGGTCTGGGCCAGCTGGCAGATGGTGTGGTGGGGCTGG
                                                                                                                                                                                                                                             AGCTGGAGCCCAGAGGCCAGCAGCCCGTGGCCAAGCCCGAGGGGAGCCCGACCGCCATCC
                                                                                                                                                                                                                                                                                     CCTTCCCGCCAGCCCCTGGTGGCCGCCTGGCCCACCTCCCACCAACTTCAGCAGCTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCAACCACAGCTTCTCCAGTGGCTATGTGGAGATGGAGTTTGAGTTTGACCGGCTGAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCAACCACAGCTTCTCCAGTGGCTATGTGGAGATGGAGTTTGAGTTTGACCGGCTGAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGCAGACAATGTATTTATCTGAGGCCGTGTACCTCAACGACTCCACCTATGACGGACATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGGTAGAGCTCTATGGCTGCCTCTGGAGGGATGGACTCCTGTCTTACACCGCCCCTGTGG
                         1935
                                                                1875
       1696
                                             1636
                                                                                   1576
                                                                                                      1815
                                                                                                                          1516
                                                                                                                                                                 1456
                                                                                                                                                                                     1695
                                                                                                                                                                                                        1396
                                                                                                                                                                                                                           1635
                                                                                                                                                                                                                                             1336
                                                                                                                                                                                                                                                                 1575
                                                                                                                                                                                                                                                                                     1276
                                                                                                                                                                                                                                                                                                       1515
                                                                                                                                                                                                                                                                                                                                                                                    1395
                                                                                                                                                                                                                                                                                                                                                                                                        1096
                                                                                                                                                                                                                                                                                                                                                                                                                           1335
                                                                                                                                                                                                                                                                                                                                                                                                                                               1036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1035
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           915
```

Š

밁

```
Š
                g
                        γ
                                           밁
                                                        δÃ
                                                                       B
                                                                                  δÕ
                                                                                                  В
                                                                                                              δÃ
                                                                                                                             В
                                                                                                                                         δÃ
                                                                                                                                                        밁
                                                                                                                                                                    Ş
                                                                                                                                                                                    DЪ
                                                                                                                                                                                               δÃ
                                                                                                                                                                                                               Дb
                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                          DЬ
                                                                                                                                                                                                                                                      200
                                                                                                                                                                                                                                                                      B
                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                  Вb
                                                                                                                                                                                                                                                                                                             δÃ
                                                                                                                                                                                                                                                                                                                                         δÃ
                                                                                                                                                                                                                                                                                                                                                         Вр
                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                     δõ
                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                               Вр
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                             δ.
                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δõ
   3016
                 2699
                              2956
                                            2639
                                                         2896
                                                                       2579
                                                                                    2836
                                                                                                  2519
                                                                                                                2776
                                                                                                                             2459
                                                                                                                                           2716
                                                                                                                                                         2399
                                                                                                                                                                       2656
                                                                                                                                                                                    2339
                                                                                                                                                                                                 2596
                                                                                                                                                                                                               2279
                                                                                                                                                                                                                                          2219
                                                                                                                                                                                                                                                        2476
                                                                                                                                                                                                                                                                      2159
                                                                                                                                                                                                                            2536
                                                                                                                                                                                                                                                                                    2416
                                                                                                                                                                                                                                                                                                  2099
                                                                                                                                                                                                                                                                                                              2356
                                                                                                                                                                                                                                                                                                                             2057
                                                                                                                                                                                                                                                                                                                                          2296
                                                                                                                                                                                                                                                                                                                                                         1997
                                                                                                                                                                                                                                                                                                                                                                      2236
                                                                                                                                                                                                                                                                                                                                                                                    1937
                                                                                                                                                                                                                                                                                                                                                                                                  2176
                                                                                                                                                                                                                                                                                                                                                                                                               1877
                                                                                                                                                                                                                                                                                                                                                                                                                             2116
                                                                                                                                                                                                                                                                                                                                                                                                                                                        2056
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1757
                                                                                                                                                                                                                                                                                                                                                                                                                                           1817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGCCTGCCTGCCCGCAGGGCCTATATGAGCTGATGCTTCGGTGCTGGAGCCGGGAGTCTG
                                         CTGGGGACTATTACCGTGTGCAGGGCCGGGCAGTGCTGCCCATCCGCTGGATGGCCTGGG
AGCAGCGACCACCCTTTTCCCCAGCTGCATCGGTTCCTGGCAGAGGATGCACTCAACACGG
                                                                    AGTGCATCCTCATGGGGAAGTTCACGACTGCGAGTGACGTGTGGGCCTTTGGTGTGACCC
                                                                                                                                                     TAGTTGGGGAAAATTTCACCATCAAAATCGCAGACTTTGGCATGAGCCGGGAACCTCTATG
                                                                                                                                                                                CGCAGGGGCCCACCATCAGCTACCCAATGCTGCTGCATGTGGCAGGCCAGATCGCCTCCG
                                                                                                                                                                                                                                                                                                                                                                                GCCAGTTTGGGGAGGTGCACCTGTGTGAGGTCGACAGCCCTCAAGATCTGGTCAGTCTTG
                                                                                                                                                                                                                                       TCAGTGCCCACCAGCTGGAGGACAAGGCAGCCGAGGGGGCCCCTGGGGACGGGCAGGCTG
                                                                                                                                                                                                                                                                  AGGACGACCCCCTCTGCATGATTACTGACTACATGGAGAACGGCGACCTCAACCAGTTCC
                                                                                                                                                                                                                                                                                                                                CAGATGCCACCAAGAATGCCAGCTTCTCCTTGTTCTCCAGGAATGATTTCCTGAAAGAGG
                                                                                                                                                                                                                                                                                                                                                     ATTTCCCCCTTAATGTGCGTAAGGGACACCCTTTGCTGGTAGCTGTCAAGATCTTACGGC
                                                                                                                                                                                                                                                                                                                                                                                                            GCGTCACCGGGGGCAACACCTATGCTGTGCCTGCACTGCCCCCAGGGGCAGTCGGGGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCCCACCTCCCCAGAACAGCGTCCCCCATTATGCCGAGGCTGACATTGTTACCCTGCAGG
                                                                                                                                                                                                                                                                                              CAGATGCCACCAAGAATG------------CCAGGAATGATTTCCTGAAAGAGG
3075
                           3015
                                                      2955
                                                                                               257<sub>8</sub>
                                         2698
                                                                    2638
                                                                                  2895
                                                                                                             2835
                                                                                                                           2518
                                                                                                                                        2775
                                                                                                                                                      2458
                                                                                                                                                                  2715
                                                                                                                                                                                  2398
                                                                                                                                                                                               2655
                                                                                                                                                                                                                          2595
                                                                                                                                                                                                                                                                                2475
                                                                                                                                                                                                            2338
                                                                                                                                                                                                                                        2278
                                                                                                                                                                                                                                                      2535
                                                                                                                                                                                                                                                                  2218
                                                                                                                                                                                                                                                                                               2158
                                                                                                                                                                                                                                                                                                            2415
                                                                                                                                                                                                                                                                                                                          2098
                                                                                                                                                                                                                                                                                                                                                                   2295
                                                                                                                                                                                                                                                                                                                                                                                 1996
                                                                                                                                                                                                                                                                                                                                                                                               2235
                                                                                                                                                                                                                                                                                                                                                                                                                          2175
                                                                                                                                                                                                                                                                                                                                                                                                                                                      2115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2055
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1995
                                                                                                                                                                                                                                                                                                                                        2355
                                                                                                                                                                                                                                                                                                                                                      2056
                                                                                                                                                                                                                                                                                                                                                                                                             1936
                                                                                                                                                                                                                                                                                                                                                                                                                                         1876
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1756
```

	TAATAAAGGTTGAGTTTTCCACAAAAAAAAAAAAAAA 3953 	91 57	Qу
	TTTTACACTAATATATGGACCTAGCTTGAGGCAATTTTAATCCCCTGCACTAGGCAGGTA	3855 3513	Qy dd
ω ω	CACATTGATTTTCTATAATCACTTGGGGTTTGTACATTTTTGGGGGGAGAGACACAGAT	3795 3453	Qy Db
	GGGGGGAAAGAGGGAGCAACGGCCCATAGCCTTGGGGTTGGACATCTCTAGTGTAGCTGC	3735 3393	Qy
	CAGTCTTGTAGCTAGAACTTCTCTAAGCCTATACGTTTCTGTGGAGTAAATATTGGGATT	3675 3333	Qу
	GARACACTGGACCTGGGGGTAGCCCCGCCCCAGCCCTCAGTCACCCCCACTTCCCACTTG	3615 3273	Qy
	TTTCCTTGTGCCTGCTCCTGTACTTGTCCTCAGCTTGGGCTTCTTCCTCCTCCATCACCT	3555 3213	Qу
	ACACTGGACCCCACTGGCTGAGAATCTGGGGGTGAGGAGGACAAGAAGGAGGAGAAATG	3495 3153	ДУ
	ACTGGACAACACTGATTCCTGGAGAGGTGGCTGCG-CCCCAGCTTCTCTCTCTCTCTCTCAC	3436 3093	Qy
	AAGGGTGGGGAGAAATATAGGATAGACACTGGACATGGCCCATTGGAGCACCTGGGCCCC	3376	Qy db
	CCCACCCAGCTGGTCCTGTGGATGGGATCCTCTCCACCCTCCTCTAGCCATCCCTTGGGG	3316	Db Qy
	CCTTCCTGGACACACTCTCATGTCCCCTTCCTGTTCTTCCTAGAAGCCCCTGTCG	3256 2959	Qy Qy
	TAGAGGCAGTGAGACTGC	93	Db
	GAGGCAGTGAGACTGCAGGTGGGCTGGGCCCACCCAGG	3196	Qy
	CTAAAACAAGAGGACACAATGGCACCTCTGCCCTTCCCCGACAGCCCATCACCTCT	3136 2879	рb
	TGTGAATCACACATCCAGCTGCCCCTCCCTCAGGGAGTGATCCAGGGGAAGCCAGTGACA	3076 2819	Qγ
		2759	Db .

RESULT 3
US-08-170-558-3
VS-08-170-558-3
; Sequence 3, Application US/08170558
; Patent No. 6001621
; GENERAL INFORMATION;
; APPLICANT: Godowski, Paul J.
; APPLICANT: Mark, Melanie R.
; APPLICANT: Scadden, David T.
; APPLICANT: Baker, Kevin P.

```
COMPUTER READABLE FORM:

MEDIUM TYPE: 5.25 inch, 360 Kb flog
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PD41n (Genentech)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/170,558
FILING DATE: 20-DEC-1993
CLASSIFICATION ADATA:
APPLICATION NUMBER: 08/157563
FILING DATE: 23-NOV-1993
ATTORNEY/AGENT INFORMATION:
NAME: HASAK, Janet E.
REGISTRATION NUMBER: 854C1
TELECOMMUNICATION INFORMATION:
TELEFAX: 415/225-1896
TELEX: 910/371-7168
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 3637 bases
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
US-08-170-558-3
                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 3589; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Baron, Will F.
TITLE OF INVENTION: Protein Tyr
NUMBER OF SEQUENCES: 35
CORRESPONDENCE ADDRESS:
ADDRESSEE: Genentech, Inc.
STREET: 460 Point San Bruno B
CITY: South San Francisco
STATE: California
                                    377
                                                      616
                                                                          317
                                                                                              556
                                                                                                                 257
                                                                                                                                    496
                                                                                                                                                       197
                                                                                                                                                                          436
                                                                                                                                                                                               137
                                                                                                                                                                                                                 376
                                                                                                                                                                                                                                                        316
                                                                                                                                                                                                                                                                                                256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY:
ZIP: 940
                                                                                                                                                                                                                                     77
                                                                                                                                                                                                                                                                            17
                                                                     GGCTGCGTTACTCCCGGGATGGTCGCCGCTGGATGGGCTGGAAGGACCGCTGGGGTCAGG
                               TGGTGGGCACCCAGGGACGGCATGCCGGGGGGCCTGGGCAAGGAGTTCTCCCGGAGCTACC
                                                                                                           CCCGCCACAGCAGGTTGGAGAGCAGTGACGGGGATGGGGCCTGGTGCCCCGCAGGGTCGG
                                                                                                                                                  ACCGGACCATCCCAGACAGTGACATCTCTGCTTCCAGCTCCTGGTCAGATTCCACTGCCG
                                                                                                                                                                                                                                 ATGCTGACATGAAGGGACATTTTGATCCTGCCAAGTGCCGCTATGCCCTGGGCATGCAGG
                                                                                                                                                                                                                                                                       GTTGGACTTGAAGGAATGCCAAGAGATGCTGCCCCCACCCCCTTAGGCCCGAGGGATCAG
                                                                                                                                                                                                                                                                                   GTTGGACTTGAAGGAATGCCAAGAGATGCTGCCCCCCACCCCCTTAGGCCCGAGGGATCAG
                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20-DEC-1993
20: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Will F.
Protein Tyrosine Kinases
S: 35
                                                                                                                                                                                                                                                                                                                          87.1%;
97.0%;
                                                                                                                                                                                                                                                                                                               Score 3451; DE Pred. No. 0; 0; Mismatches
                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Blvd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Kb floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    disk
                                                                                                                                                                                                                                                                                                                                    멂
                                                                                                                                                                                                                                                                                                                                   ω;
                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                    3637;
                                                                                                                                                                                                                                                                                                                105;
                                                                                                                                                                                                                                                                                                              Gaps
                                                                                         615
                                 436
                                                  675
                                                                      376
                                                                                                                                555
                                                                                                                                                                                                              435
                                                                                                            316
                                                                                                                                                                       495
                                                                                                                                                                                           196
                                                                                                                                                                                                                                  136
                                                                                                                                                                                                                                                     375
                                                                                                                                                                                                                                                                       76
                                                                                                                                                                                                                                                                                          315
                                                                                                                                                   256
                                                                                                                                                                                                                                                                                                                w
                δÃ
                                        В
                                                         Š
                                                                               밁
                                                                                                 Ωy
                                                                                                                      밁
                                                                                                                                        γΩ
                                                                                                                                                            В
                                                                                                                                                                             20
                                                                                                                                                                                                   밁
                                                                                                                                                                                                                     20
                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                           Ϋ́
                                                                                                                                                                                                                                                                                  Вb
                                                                                                                                                                                                                                                                                                  δÃ
                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                    B
                                                                                                                                                                                                                                                                                                                                                                                                                      Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                             망
                                                                                                                                                                                                                                                                                                                                                                                                                                                             20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 QV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                     1756
                                        1457
                                                           1696
                                                                               1397
                                                                                                  1636
                                                                                                                    1337
                                                                                                                                         1576
                                                                                                                                                            1277
                                                                                                                                                                                                                                           1157
                                                                                                                                                                                                                                                              1396
                                                                                                                                                                               1516
                                                                                                                                                                                                   1217
                                                                                                                                                                                                                       1456
                                                                                                                                                                                                                                                                                  1097
                                                                                                                                                                                                                                                                                                    1336
                                                                                                                                                                                                                                                                                                                        1037
                                                                                                                                                                                                                                                                                                                                          1276
                                                                                                                                                                                                                                                                                                                                                                                                                         1156
                                                                                                                                                                                                                                                                                                                                                                                 1216
                                                                                                                                                                                                                                                                                                                                                                                                                                                               1096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1036
                                                                                                                                                                                                                                                                                                                                                              977
                                                                                                                                                                                                                                                                                                                                                                                                    917
                                                                                                                                                                                                                                                                                                                                                                                                                                             857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       736
GAGAGCCACCCCCGTACCAGGAGCCCCGGCCTCGTGGGAATCCGCCCACTCCGCTCCCT
                                    CCTTCCCGCCAGCCCCCTGGTGGCCGCCTGGCCCACCTCCCACCACCTCAGCAGCTTGGCTICCCCTCCCGCCAGCCCCTGGTGGCCGCCTGGCCCACCACCACCTTCAGCAGCTTGG
                                                                                                                                                                                                                                                                                                                                                           GCGGGGTGGAATGTCGCTTCCGGCGTGGCCTGCCATGGCCTGGGAGGGGAGGCCCATGC
                                                                                                                                                                                                                                                                                                                                                                                                 CCTTCCAGGCTATGCAGGTCCACTGTAACAACATGCACACGCTGGGAGCCCGTCTGCCTG
                                                                                                                                                                                                                                      TCAGCGÁAATCTCCTTCATCTCTGATGTGGTGAACAATTCCTCTCCGGCACTGGGAGGCA
                                                                                                                                                                                                                                               TCAGCGAAATCTCCTTCATCTCTGATGTGGTGAACAATTCCTCTCCGGCACTGGGAGGCA
                                                                                                                                                                                                                                                                                         GCGGCCGTGTGGCTCGCTTTCTGCAGTGCCGCTTTCCTCTTTTGCGGGGCCCTGGTTACTCT
                                                                                                                                                                                                                                                                                                                               GCCACAACCTAGGGGGCAACCTGGGGGACCCCAGAGCCCGGGCTGTCTCAGTGCCCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                         ATGACTTTAGGAAGAGTCAGGAGCTGCGGGTCTGGCCAGGCTATGACTATGTGGGATGGA
                                                                                                                                                                                                                                                                                GCGGCCGTGTGGCTCCTTTCTGCAGTGCCGCTTCCTCTTTGCGGGGCCCCTGGTTACTCT
                                                                                                                                                                                                                                                                                                                      GCCACAACCTAGGGGGCAACCTGGGGGACCCCAGAGCCCGGGCTGTCTCAGTGCCCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCGTGGGCGGACTGCAGTATGGGGGTCTGGGCCAGCTGGCAGATGGTGTGGTGGGGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGCAGACAATGTATTTATCTGAGGCCGTGTACCTCAACGACTCCACCTATGACGGACATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGGTGATCTCAGGCAATGAGGACCCTGAGGGAGTGGTGCTGAAGGACCTTGGGCCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGGTGATCTCAGGCAATGAGGACCCTGAGGGAGTGGTGCTGAAGGACCTTGGGCCCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGCTGCGTTACTCCCGGGATGGTCGCCGCCTGGATGGGCTGGAAGGACCGCTGGGGTCAGG
                                     1516
1576
                  1815
                                                         1755
                                                                                               1695
                                                                                                                    1396
                                                                                                                                       1635
                                                                                                                                                                             1575
                                                                                                                                                                                                                                                           1455
                                                                                                                                                                                                                                                                               1156
                                                                                                                                                                                                                                                                                                  1395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1095
                                                                                                                                                                                                 1276
                                                                                                                                                                                                                     1515
                                                                                                                                                                                                                                        1216
                                                                                                                                                                                                                                                                                                                                        1335
                                                                                                                                                                                                                                                                                                                                                            1036
                                                                                                                                                                                                                                                                                                                                                                               1275
                                                                                                                                                                                                                                                                                                                                                                                                                      1215
                                                                                                                                                                                                                                                                                                                                                                                                                                                            1155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1035
                                                                                                                                                                                                                                                                                                                      1096
                                                                                                                                                                                                                                                                                                                                                                                                  976
                                                                                                                                                                                                                                                                                                                                                                                                                                           916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       796
```

Ş

밁

Ş 문 δÃ

밁 δÃ 밁 8 당 Ş 밁 ğ 밁 Qγ

. Оу Оу Оу

đđ j

Qy

	anna Anna
Db 2639 6	1875
b 2639 y 2956 b 2699 y 3016 b 2759 b 2759 b 2759 b 2759 b 2759 c 3076 c 2879 y 3196 c 2939 c 3316 c 33256 c 33736 c 33	л
b 2639 y 2956 b 2699 y 3016 b 2759 b 2759 b 2759 b 2759 b 2759 c 3076 c 2879 y 3196 c 2939 c 3316 c 33256 c 33736 c 33	
b 2639 y 2956 b 2699 y 3016 b 2759 b 2759 b 2759 b 2759 b 2759 c 3076 c 2879 y 3196 c 2939 c 3316 c 33256 c 33736 c 33	
b 2639 y 2956 b 2699 y 3016 b 2759 b 2759 b 2759 b 2759 b 2759 c 3076 c 2879 y 3196 c 2939 c 3316 c 33256 c 33736 c 33	
3 5 3 5 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Q
	2896
PROCEDEGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGGG	
NACGCGGGGGGATTC: NACGCGGGGGGATTC: NACGCGGGGGGATTC: NCCCCGGTGGGGGATTC: NCCCCGGTGGGGGATTC: NCCCCGGTGGCGGGGGAGGCCTACCAGGGCTGCCAGGCTGCCAGGCTGCCAGGCTGCAGGCTGCAGGACACAATGGCATGCAATGGAATGGAATGGATGCAGGAGAATATATAT	CGAG
GGGGGGGGTTC: GGGGGGGGGGGGGGGGGGGGGGGGGGG	ACGC
GCCTACO CCCACO CCACO CCCACO CC	eeeee
- 878 979 979 970 979 979 979 979 979 979 976 - 3 - 3 424 828 878 878 87	AGTTO
PRICE PROFES AND ADARA	TTCC
ARADAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	GGGAC
CCCAGG GGGA GGGGA GGGGA GGGA GGGA GGGA	CAGG
SCCGGCH PICCHILLIAN PROCEAGA PROCEAGA PROCEAGA PROCECCO CCCAGGG CCCCCCC CCCAGGG CCCCCCC CCCAGGG CCCCCCC CCCAGGG CCCAGCT CCCAGC	3000
THE COLORS OF TH	CAGG
Negaci (Negaci	TGTAC
CCTGRA CCTCAL CC	CTGT
GGAGCCGGGAGCCTCTCTCTCTCTCTCTCTCTCTCTCTCT	ccee
ω ω ω ω το	C 2955

Db QY		2895 2638	2836 TGTGGGAGGTGCTGATGCTCTGTAGGGCCCAGCCCTTTGGGCAGCTCACCGACGACGAGCAGC
Db Qy		2835 2578	2776 AGTGCATCCTCATGGGGAAGTTCACGACTGGGAGTGACGTGTGGGCCTTTGGTGTGACCC
v dd v		2775 2518	2716 CTGGGGACTATTACCGTGTGCAGGGCCGGGCAGTGCTGCCCATCCGCTGGATGGCCTGGG
do Qy		2715 2458	2656 TAGTTGGGGAAAATTTCACCATCAAAATCGCAGACTTTGGCATGAGCCGGAACCTCTATG
рр Од		2655 2398	2596 GCATGCGCTATCTGGCCACACTCAACTTTGTACATCGGGACCTGGCCACGCGGAACTGCC
рь Оу		2595 2338	2536 CGCAGGGGCCCACCATCAGCTACCCAATGCTGCTGCATGTGGCAGCCCAGATCGCCTCCG
Db Qy		2535 2278	2476 TCAGTGCCCACCAGCTGGAGGACAAGGCAGCCGAGGGGGCCCCTGGGGACGGGCAGGCTG
dd Qy	×	2475 2218	2416 AGGACGACCCCTCTGCATGATTACTGACTACATGGAGAACGGCGACCTCAACCAGTTCC
Ор		2415 2158	2356 TGAAGATCATGTCGAGGCTCAAGGACCCCAACATCATTCGGCTGCTGGGCGTGTGTGT
Оу		2355 2098	2296 CAGATGCCACCAAGAATGCCAGCTTCTCCTTGTTCTCCAGGAATGATTTCCTGAAAGAGG
ob Qy		2295 2056	2236 ATTTCCCCCTTAATGTGCGTAAGGGACACCCTTTGCTGGTAGCTGTCAAGATCTTACGGC
ob og		2235 1996	2176 GCCAGTTTGGGGAGGTGCACCTGTGTGAGGTCGACAGCCCTCAAGATCTGGTCAGTCTTG
Db Qy	340	2175 1936	2116 GGCCCCCAGAGTGGATTTCCCTCGATCTCGACTCCGCTTCAAGGAGAGCTTGGCGAGG
Фр		2115 1876	2056 GCGTCACCGGGGGCAACACCTATGCTGTGCCTGCACTGCCCCCAGGGGCAGTCGGGGATG
Db Qy		2055 1816	1996 CCCCACCTCCCCAGAACAGCGTCCCCCATTATGCCGAGGCTGACATTGTTACCCTGCAGG
da Vo		1995 1756	1936 ACACCCAGGCCTACAGTGGGGACTATATGGAGCCTGAGAAAGCCAGGCGCCCGCC
Db Oy		1935	1876 CTTACGCCCGTCCCCCTCGAGGCCCGGGGCCCCCCCACACCCCGCCTGGGCCAAACCCACCACACCCGCCTGGGCCAAACCCACCACACACCCGCCTGGGCCAAACCCACACACCCGCCTTGGGCCAAACCCACACACCACACCCGCCTTGGGCCAAACCCACACACCACACCCGCCTTGGGCCAAACCCACACACCACACACCCGCCTTGGGCCAAACCCACACACA
Db Oy		1875	1816 GTGTCCCCAATGGCTCTGCGTTGCTGCTCCCAATCCAGCCTACCGCCTCCTTCTGGCCA

. Оу Оу

Оy

Db Oy

Дb

Db Qy

VQ.

망

Db

Db Db

Qy

Qy Qy Db B 8

оу Оу Оу Оу Ор

```
Š
                                                                         밁
                                                                                            Ş
                                                                                                                          밁
                                                                                                                                                  Š
                                                                                                                                                                             밁
                                                                                                                                                                                                    Ş
                      밁
                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                        Š
                                                                                                                                                                                                                                                                                                                                                       US-08-447-314-3
                                                                                                                                                                                                                                                                                                                                                                                                        TELECOMMUNICATION INFORMATION:
TELEPHONE: 415/925-1996
TELEPAX: 415/932-9881
TELEX: 910/371-7168
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 3637 bases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-447-314-3
                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 3589; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
Patent No
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 09/157563
PILING DATE: 23-NOV-1993
ATTORNEY_AGENT INFORMATION:
NAME: Hasak, Janet E.
REGISTRATION NUMBER: 28,616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Baker, Kevin P.
APPLICANT: Baron, Will F.
TITLE OF INVENTION: Protein Tyrosine
NUMBER OF SEQUENCES: 35
CORRESPONDENCE ADDRESS:
ADDRESSEE: Genentech, Inc.
STREET: 460 Point San Bruno Blvd
CITY: South San Francisco
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/170558
FILING DATE: 20-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       tent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: 5.25 inch,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: patin (Genentech)
CURRENT APPLICATION DATA:
                                             .496
                                                                         197
                                                                                                436
                                                                                                                            137
                                                                                                                                                     376
                                                                                                                                                                                       316 GAGCTATGGGACCAGAGGCCCTGTCATCTTTACTGCTGCTGCTGCTGTGGTGGCAAGTGGAG
                                                                                                                                                                                                                                            256 GTTGGACTTGAAGGAATGCCAAGAGATGCTGCCCCCACCCCTTAGGCCCGAGGGATCAG
                                                                                                                                                                               77
                                                                                                                                                                                                                                  17
                                                                                                                                                                                                                                                                                                                                                                            TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US/08/447,314 FILING DATE: 22-MAY-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ZIP: 94080
                                         CCCGCCACAGCAGGTTGGAGAGCAGTGACGGGGATGGGGGCCTGGTGCCCCGCAGGGTCGG
                                                                  ACCGGACCATCCCAGACAGTGACATCTCTGCTTCCAGCTCCTGGTCAGATTCCACTGCCG
                   CCGGCCACAGCAGCTGGAGAGCAGTGACGGGGATGGGGCCTGGTGCCCCGCAGGGTCGG
                                                                                                                     ATGCTGACATGAAGGGACATTITGATCCTGCCAAGTGCCGCTATGCCCTGGGCATGCAGG
                                                                                                                                                                         GAGCTATGGGACCAGAGGCCCTGTCATCTTACTGCTGCTGCTCTTGGTGGCAAGTGGAG
                                                                                                                                                                                                                            INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Application US/08447314
                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Scadden,
                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                               87.1%;
97.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Protein Tyrosine 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          David T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              360 Kb floppy
                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   854C1D2
                                                                                                                                                                                                                                                                                                 Score 3451;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -;
                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Kinases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                disk
                                                                                                                                                                                                                                                                                                             DB 3;
                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                           Length 3637;
                                                                                                                                                                                                                                                                                  Indels 105;
                                                                                                                                                                                                                                                                                Gaps
                 316
                                          555
                                                                   256
                                                                                            495
                                                                                                                        196
                                                                                                                                                435
                                                                                                                                                                           136
                                                                                                                                                                                                    375
                                                                                                                                                                                                                              76
                                                                                                                                                                                                                                                                                 ω
••
                            밁
                                                 δÃ
                                                                              밁
                                                                                                      δÃ
                                                                                                                                 뫄
                                                                                                                                                         Ş
                                                                                                                                                                                    밁
                                                                                                                                                                                                            Ŋ.
                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                             뫄
                                                                                                                                                                                                                                                                                                                     Š
                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                           Q
                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ğ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δÃ
                                                                                                        1516
                                                                                                                                                                                      1157
                                                                                                                                                                                                                                         1097
                                                                                                                                                                                                                                                                   1336
                                                                                 1277
                                                                                                                                                            1456
                                                                                                                                                                                                                                                                                                                                                                                                                               1156
                                                                                                                                                                                                                                                                                                                                                                           1216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1036
                                                                                                                                                                                                                                                                                                                                                  977
                                                                                                                                                                                                                                                                                                                                                                                                     917
                                                                                                                                                                                                                                                                                                                                                                                                                                                         857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      556
GGCGGCTGCACTGGCGGGGCTCCTCAGCAAGGCTGAACGGAGGGTGTTGGAAGAGGAGC
                                      TCATCGGCTGCCTGGTGGCCATCATCCTGCTCCTGCTGCTCATCATTGCCCTCATGCTCT
                                                                          AGCTGGAGCCCAGAGGCCAGCAGCCCGTGGCCAAGGCCGAGGGGAGCCCGACCGCCATCC.1575
                                                                                                                                                                                GCGGGGTGGAATGTCGCCTTCCGGCGTGGCCCTGCCATGCCCTGGGAGGGGGAGCCCATGC
                                                                                                                               CCTTCCCGCCAGCCCCTGGTGGCCGCCTGGCCCACCTCCCACCTTCAGCAGCTTGG 1515
                                                                                                                                                                                                                                                    GCGGCCGTGTGGCTCGCCTTTCTGCAGTGCCGCTTCCCTCTTTTGCGGGGCCCCTGGTTACTCT
                                                                                                                                                                                                                                                                                                        GCCACAACCTAGGGGGCAACCTGGGGGACCCCAGAGCCCCGGGCTGTCTCAGTGCCCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                                 CCTTCCAGGCTATGCAGGTCCACTGTAACAACATGCACACGCTGGGAGCCCGTCTGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCGGCCGTGTGGCTCGCTTTCTGCAGTGCCGCTTCCTCTTTGCGGGGCCCCTGGTTACTCT 1156
                                                                                                                                                                                                                                                                                            GCCACAACCTAGGGGGCAACCTGGGGGGACCCCAGAGCCCGGGCTGTCTCAGTGCCCCTTG
                                                                                                                                                                                                                                                                                                                                                                                                 CCTTCCAGGCTATGCAGGTCCACTGTAACAACATGCACACGCTGGGAGCCCGTCTGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATGACTTTAGGAAGAGTCAGGAGCTGCGGGTCTGGCCAGGCTATGACTATGTGGGATGGA 1095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGCAGACAATGTATTTATCTGAGGCCGTGTACCTCAACGACTCCACCTATGACGGACATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGGTGATCTCAGGCAATGAGGACCCTGAGGGAGTGGTGCTGAAGGACCTTGGGCCCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCGTGGGCCGACTGCAGTATGGGGGGTCTGGGCCAGCTGGCAGATGGTGTGGTGGGGGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGGTAGAGCTCTATGGCTGCCTCTGGAGGGATGGACTCCTGTCTTACACCGCCCCTGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCCTGCGTTACTCCCGGGATGGTCGCCGCTGGATGGGCTGGAAGGACCGCTGGGGTCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGGTGGGCACCCAGGGACGGCATGCCGGGGGGCCTGGGCAAGGAGTTCTCCCGGAGCTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGGTGGGCACCCAGGGACGGCATGCCCGGGGGCCTGGGCAAGGAGTTCTCCCCGGAGCTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGTTTCCCAAGGAGGAGGAGTACTTGCAGGTGGATCTACAACGACTCCACCTGGTGGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGTTTCCCAAGGAGGAGGAGTACTTGCAGGTGGATCTACAACGACTGCACCTGGTGGCTC
```

1395

1335

1096

1275

976 1215 916 1155 1035

796

975

676 915 616 855

795

496 735 436

675

615 376

556

1036

1695

γQ

DЬ Qy 망 20 DЬ

CTGGGGACTATTACCGTGTGCAGGGCCGGGCAGTGCTGCCCATCCGCTGGATGGCCTGGG 2775 QY 3795 IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII		GCATGCGCTATCTGGCCACACTCAACTTTGTACATCGGGACCTGGCCACGCGGAACTGCC 2655	CGCAGGGGCCCACCATCAGCTACCCAATGCTGCATGTGGCAGCCCAGATCGCCTCCG 2595	2535 Qy 2278 Db	ω ω	2415 Qy 2158 Db	CAGATGCCACCAAGAATGCCAGCTTCTCCTTGTTCTCCCAGGAATGATTTCCTGAAAGAGG 2355	N) (4)	Κ Σ (4)	N 6	· N W	CCCCACCTCCCCAGAACAGCGTCCCCCATTATGCCGAGGCTGACATTGTTACCCTGCAGG 2055			
5 CACATTGATTTTTCTATAATCACTTGGGGTTTGTACATTTTTGGGGGGAGAGACACAGAT 	5 GGGGGAAAGAGGGAGCAACGGCCCATAGCCTTGGGGTTGGACATCTCTAGTGTAGCTGC 	5 CAGTCTTGTAGCTAGAACTTCTCTAAGCCTATACGTTTCTGTGGAGTAAATATTGGGATT 	5 GAAACACTGGACCTGGGGGTAGCCCCGCCCCAGCCCTCAGTCACCCCCACTTCCCACTTG	TTTCC	5 ACACTGGACCCCACTGGCTGAGAATCTGGGGGTGAGGAGGACAAGAAGGAGGAGAAAATG				CCCTI	AATAC AATAC		6 TGTGAATCACACATCCAGCTGCCCCTCCCTCAGGGAGTGATCCAGGGGAAGCCAGTGACA 		TCAT	AGTGC

DЪ δõ В Ş DЬ Ş В Ş B Ş В Ş В

δ

Š В

밁 γQ Ъ Ş 밁 δÃ Ъ Š Ъ 20 B ş DЬ Ş

```
밁
                                           Š
                                                                         밁
                                                                                               Š
                                                                                                                                                                                          ropology: US-08-445-461-3
                                                                                                                                                                                                                                              CURKENT APPLICATION NUMBER: US/08/445,4
FILING DATE: 22-MAY-1995
CLASSIFICATION: 530
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/17058
FILING DATE: 20-DEC-1993
PRIOR APPLICATION NUMBER: 08/157563
FILING DATE: 20-DEC-1993
PRIOR APPLICATION NUMBER: 08/157563
PRIOR APPLICATION NUMBER: 08/157563
APPLICATION NUMBER: 28-616
REPERENCE/AGENT INFORMATION:
NAME: HASAK, JANGET: 28-616
RESISTRATION NUMBER: 28-616
RESISTRATION NUMBER: 28-616
RESISTRATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415/25-1896
TELEFAX: 415/952-9881
TELEFAX: 910/371-7168
INFORMATION FOR SEO ID NO: 3:
SEQUENCE CHARACTERISTICS:
TENCTH: 367 bases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-08-445-461-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Š
                                                                                                                                          Query
Best L
                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 3, Application US/08445461 Patent No. 6096527 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: 5.25 inch, 360 Kb f
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOPTWARE: patin (Genentech)
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Godowski, Paul J., (
APPLICANT: Mark, Melanie R. i
APPLICANT: Scadden, David T.
APPLICANT: Baker, Kevin P.
APPLICANT: Baron, Will F.
TITLE OF INVENTION: Protein Tyrosine Kinases
NUMBER OF SEQUENCES: 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3855
                                               316
                                                                                                   256
                                                                                                                                                                                                                                LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE: Genentech, Inc.
STREET: 460 Point San Bruno
CITY: South San Francisco
STATE: California
COUNTRY: USA
                                                                         17
                       77
                                                                                                                                                                                                                 TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                           Match
Local Similarity
les 3589; Conserv
                                  GAGCTATGGGACCAGAGGCCCTGTCATCTTTACTGCTGCTGCTCTTGGTGGCAAGTGGAG 375
                                                                   GTTGGACTTGAAGGAATGCCAAGAGATGCTGCCCCCACCCCCTTAGGCCCGAGGGATCAG 315
                 GAGCTATGGGACCAGAGGCCCTGTCATCTTTACTGCTGCTCCTTGGTGGCAAGTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    94080
                                                                                                                                                                                                                                           3637 bases
                                                                                                                        87.1%;
nilarity 97.0%;
Conservative
                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US/08/445,461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              360 Kb floppy
                                                                                                                                                                                                                                                                                                                                       854C3
                                                                                                                        Score 3451; D
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Blvd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               disk
                                                                                                                                                   DB
                                                                                                                                                  ω
••
                                                                                                                        S
                                                                                                                                                 Length 3637;
                                                                                                                        105;
                                                                                                                     Gaps
                 136
                                                                                                                       Ψ
                              B
                                                     δÃ
                                                                                망
                                                                                                        Ş
                                                                                                                                  В
                                                                                                                                                         δÃ
                                                                                                                                                                                    밁
                                                                                                                                                                                                             QΥ
                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                    δÖ
                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ΩV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Д
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20
    1456
                              1157
                                                  1396
                                                                                1097
                                                                                                         1336
                                                                                                                                   1037
                                                                                                                                                            1276
                                                                                                                                                                                                              1216
                                                                                                                                                                                                                                                                 1156
                                                                                                                                                                                                                                                                                                                     1096
                                                                                                                                                                                                                                                                                                                                                                         1036
                                                                                                                                                                                    977
                                                                                                                                                                                                                                        917
                                                                                                                                                                                                                                                                                           857
                                                                                                                                                                                                                                                                                                                                               797
                                                                                                                                                                                                                                                                                                                                                                                                                            976
                                                                                                                                                                                                                                                                                                                                                                                                                                                      677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        617
                                                                                                                                                                                                                                                                                                                                                                                                  737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             376
CCTTCCCGCCAGCCCCTGGTGGCCGCCTGGCCCACCTCCCAACTTCAGCAGCTTGG
                       GCCACAACCTAGGGGGCAACCTGGGGGACCCCAGAGCCCGGGCTGTCTCAGTGCCCCTTG
                                                                                                                                                                                               GCGGGGTGGAATGTCGCCTTCCGGCGTGGCCCTGCCATGGCCTGGGAGGGGGAGCCCATGC
                                                                                                                                                                                                                                                   CCTTCCAGGCTATGCAGGTCCACTGTAACAACATGCACACGCTGGGAGCCCGTCTGCCTG
                                                                                                                                                                                                                                                                                                                                          CCGTGGGCGGACTGCAGTATGGGGGTCTGGGCCAGCTGGCAGATGGTGTGGTGGGGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                GGCAGACAATGTATTTATCTGAGGCCGTGTACCTCAACGACTCCACCTATGACGGACATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCAACCACAGCTTCTCCAGTGGCTATGTGGAGATTGGAGTTTTGAGTTTTGACCGGCTGAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATGCTGACATGAAGGGACATTTTGATCCTGCCAAGTGCCGCTATGCCCTGGGCATGCAGG
                                                                                                                                                                                   GCGGGGTGGAATGTCGCCTTCCGGCGTGGCCCTGCCATGGCCTGGGAAGGGGGAAGCCCATGC
                                                                                                                                                                                                                                      CCTTCCAGGCTATGCAGGTCCACTGTAACAACATGCACACGCTGGGAGCCCGTCTGCCTG
                                                                                                                                                                                                                                                                                        GCAACCACAGCTTCTCCAGTGGCTATGTGGAGATGGAGTTTGAGTTTGACCGGCTGAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGGTGATCTCAGGCAATGAGGACCCTGAGGGAGTGGTGCTGAAGGACCTTGGGCCCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGCTGCGTTACTCCCGGGATGGTCGCCGCTGGATGGGCTGGAAGGACCGCTGGGGTCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGGTGGGCACCCAGGGACGGCATGCCGGGGGCCTGGGCAAGGAGTTCTCCCCGGAGCTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCCGCCACAGCAGGTTGGAGAGCAGTGACGGGGATGGGGCCTGGTGCCCCGCAGGGTCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCGGACCATCCCAGACAGTGACATCTCTGCTTGCAGCTCCTGGTCAGATTCCACTGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGGTGATCTCAGGCAATGAGGACCCTGAGGGAGTGGTGCTGAAGGACCTTGGGCCCCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGCTGCGTTACTCCCGGGATGGTCGCCGCTGGATGGGCTGGAAGGACCGCTGGGGTCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGGTGGGCACCCAGGGACGGCATGCCGGGGGGCCTGGGCAAGGAGTTCTCCCGGAGCTACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCCGCCACAGCAGGTTGGAGGAGCAGTGACGGGGATGGGGCCTGGTGCCCCGCAGGGTCGG
```

1335

1096

1275

1036

1215

916 1155 856

976

1095

1035

736 975

915

676

855

919

795

496

556

436

675

376

615 316 555 256 495 196 435

796

1156

1515

2536 CGCAGGGGCCCACCATCAGCTACCCCAATGCTGCTGCATGTGGCAGCCCAGATCGCCTCCG 2595	2476 TCAGTGCCCAGCTAGCAGGAGAGAAGGCAGCCGAGGGGGGCCCCTGGGGACGGGCAGGCTG 2535	GTTCC 	2356 TGAAGATCATGTCGAGGCTCAAGGACCCCAACATCATTCGGCTGCTGGGCGTGTGTGT	2296 CAGATGCCACCAAGAATGCCAGCTTCTCCTTGTTCTCCAGGAATGATTTCCTGAAAGAGG 2355	2236 ATTTCCCCCTTAATGTGCGTAAGGGACACCCTTTGCTGGTAGCTGTCAAGATCTTACGGC 2295	2176 GCCAGTTTGGGGAGGTGCACCTGTGTGAGGTCGACAGCCCTCAAGATCTGGTCAGTCTTG 2235	2116 GGCCCCCAGAGTGGATTTCCCTCGATCTCGACTCCGCTTCAAGGAGAAGCTTGGCGAGG 2175	2056 GCGTCACCGGGGGCAACACCTATGCTGTGCCCTGCACTGCCCCAGGGGCAGTCGGGGATG 2115	1996 CCCCACCTCCCCAGAACAGCGTCCCCCATTATGCCGAGGCTGACATTGTTACCCTGCAGG 2055	1936 ACACCCAGGCCTACAGTGGGGACTATATGGAGCCTGAGAAGCCAGGCGCCCCGCTTCTGC 1995	1876 CTTACGCCCGTCCCCCCCGGAGGCCCGGGCCCACACCCGCCTGGGCCAAACCCACCA 1935 	1816 GTGTCCCCAATGGCTCTGCGTTGCTGCTCCCAATCCAGCCTACCGCCCTCCTTCTGGCCA 1875	1756 GAGAGCCACCCCCGTACCAGGAGCCCCGGCCCTGGTGGGAATCCGCCCCACTCCGCTCCCT 1815	1696 TGACGGTTCACCTCTGTCCCTGfGGACACTATCCTCATCAACAACCGCCCAGGTCCTA 1755	1636 GCCGGCTGCACTGGCGAGGCTCCTCAGCAAGGCTGAACGGAGGGTGTTGGAAGAGGAGC 1695	1576 TCATCGGCTGGCTGGGCGATCATCATCCTGCTGCTGCTGCTCATCATTGCCCTCATGCTCT 1635	1516 AGCTGGAGCCCAGAGGCCAGCAGCCGTGGCCAAGGCCGAGGGGAGGCCGACCGCCATCC 1575	
	•											. •						*
			,												_			
Qу з рь з	w w	Qу 3 рь 3	Фу 3 Бъ . 3	Qу 3 рь 3	Qу 3 Db 2	Qy 3 Db 2	N (a)	Qу 3 Db 2			Оу 2 Db 2	Qу 2 Db 2	Db 2	b dy	₽ Qy			•
615 GAAACACTGGACCTGGGGGTAGCCCCGCCCCCAGCCCTCAGTCACCCCCCACTTCCCACTTG 3674	TTTCC	ωσ	436 ACTGGACAACACTGATTCCTGGAGAGGTGGCTGCG-CCCCAGCTTCTCTCTCTCCCTGTCAC 3494	376 AAGGGTGGGGAGAAATATAGGATAGACACTGGACATGGCCCCATTGGAGCACCTGGGCCCC 3435 	316 CCCACCCAGCTGGTCCTGTGGATGGGATCCTCTCCACCCTCCTCTAGCCATCCCTTGGGG 3375	3256 CCCTTCCTGGACACACTCTCATGTCCCTTCCTTCTTCCTTC	39	3136 CTAAAACAAGAGGACACAATGGCACCTCTGCCCTTCCCCTCCCGACAGCCCATCACCTCT 3195	076 819	9 6	956 CGCC	2896 TCATCGAGAACGCGGGGGAGTTCTTCCGGGACCAGGGCCGGCAGGTGTACCTGTCCCGGC 2955	2836 TGTGGGAGGTGCTGATGCTCTGTAGGGCCCAGCCCTTTGGGCAGCTCACCACCACCAGCAGC 2895	2776 AGTGCATCCTCATGGGGAAGTTCACGACTGCGAGTGACGTGTGGGCCTTTGGTGTGACCC 2835 	2716 CTGGGGACTATTACCGTGTGCAGGGCCGGGCAGTGCTGCCATCCGCTGGATGGCCTGGG 2775	TAGI 	6 GCAT 9 GCAT	79 CGCAGGGGCCCACCATCAGCTACCCAATGCTGCTGCATGTGGCAGCCCAGATCGCCTCCG

Š 밁

Š DЬ Вb

Ş В

DЬ Š

Ş 밁 νQ DЪ Ş 밁 ş 8 δÃ DЬ 9 밁 δÃ 밁 δÃ Вb δÃ В Š B Š В λÕ В δÕ Ъ

Ş

```
; STRANDEDNESS: ; TOPOLOGY: 11: US-08-445-640-7
                                   CURRENT APPLICATION DATA:
APPLICATION UNMBER: US/08/445,640
FILING DATE: 22-MAY-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION UNMBER: 08/170558
FILING DATE: 20-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION UNMBER: 08/157563
PRIOR APPLICATION UNMBER: 08/157563
FILING DATE: 23-NOV-1993
ATTORNEY/AGENT INFORMATION:
REGISTRATION NUMBER: 28,616
REFERENCE/DOCKET NUMBER: 854C2
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415/952-9881
TELEFAX: 415/952-9881
TELEFAX: 910/371-7168
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 1197 DASSS
TYDE: Nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 6
US-08-445-640-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      멂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ᄝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Q.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 7, Appli
Patent No. 570985
                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:

MEDIUM TYPE: 5.25 inch, 360 K
COMPUTER: IBM PC competible
OPERATING SYSTEM: PC-DOS/MS-D
SOFTWARE: patin (Genentech)
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES: 35
                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTTTACACTAATATATGGACCTAGCTTGAGGCAATTTTAATCCCCTGCACTAGGCAGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTTTACACTAATATATGGACCTAGCTTGAGGCAATTTTAATCCCCTGCACTAGGCAGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    South San Francisco : California
                                                                                                                                                                                                                                                                                                                                                                                             94080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Application US/08445640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Godowski, Paul J.
Mark, Melanie R.
                                                                                                                                                                                                                                                                                                                                                                                                                                           460 Point San Bruno
                                                                                                                                                                                                                                                                                                                                                                                                      USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Baker, Kevin P
Baron, Will F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Scadden, David T.
            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Genentech,
                      single
                                                                                                                                                                                                                                                                                                                                      PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                              360 Kb floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tyrosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Kinases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3734
```

```
δ
                                                             밁
                     밁
                                                                               Ş
                                                                                                     밁
                                                                                                                       δÃ
                                                                                                                                             밁
                                                                                                                                                               Ş
                                                                                                                                                                                  밁
                                                                                                                                                                                                    Š
                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                            Š
                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                               ğ
                                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                                                      Ъ
                                                                                                                                                                                                                                                                                                                                                                                                        Š
                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Sim
Matches 1194;
                                                                                 1275
                                                                                                                        1215
                                                                                                                                                                1155
                                                                                                                                                                                                      1095
                                                                                                                                                                                                                                              1035
                       961
                                                             901
                                                                                                     841
                                                                                                                                           781
                                                                                                                                                                                  721
                                                                                                                                                                                                                           199
                                                                                                                                                                                                                                                                  601
                                                                                                                                                                                                                                                                                     975
                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               615
                                                                                                                                                                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                        GGCGGCCGTGTGCGCTTTCTGCAGTGCCGCTTCCTCTTTGCGGGGGCCCTGGTTACTC
                                                         CGCCACAACCTAGGGGGCAACCTGGGGGACCCCAGAGCCCGGGCTGTCTCAGTGCCCCTT
                                                                     CGCCACAACCTAGGGGGCAACCTGGGGGGACCCCAGAGGCCCGGGCTGTCTCAGTGCCCCTT
                                                                                                            GGCGGGTGGAATGTCGCTTCCGGCGTGGCCCTGCCATGGCCTGGGAGGGGGAGGCCCATG
                                                                                                                                                                                                                     TTCAGCGAAATCTCCTTCATCTCTGATGTGGTGAACAATTCCTCTCCGGCACTGGGAGGC
                                                                                                  GGCGGGGTGGAATGTCGCTTCCGGCGTGGCCCTGCCATGGCCTGGGAGGGGGAGCCCCATG
                                                                                                                                                                               AGCAACCACAGCTTCTCCAGTGGCTATGTGGAGATGGAGTTTGAGTTTGACCGGCTGAGG
                                                                                                                                                                                         AGCAACCACAGCTTCTCCAGTGGCTATGTGGAGATGGAGTTTGAGTTTTGACCGGCTGAGG
                                                                                                                                                                                                                                                             ACCGTGGGCGGACTGCAGTATGGGGGTCTGGGCCAGCTGGCAGATGGTGTGGTGGGGCTG
                                                                                                                                                                                                                                                                                                              GGGCAGACAATGTATTTATCTGAGGCCGTGTACCTCAACGACTCCACCTATGACGACAT
                                                                                                                                                                                                                                                                                                                                           CTGGTGGGCACCCAGGGACGGCATGCCGGGGGGCCTGGGCAAGGAGTTCTCCCGGAGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTGTTTCCCAAGGAGGAGGAGTACTTGCAGGTGGATCTACAACGACTCCACCTGGTGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GACCGGACCATCCCAGACAGTGACATCTCTGCTTCCAGCTCCTGGTCAGATTCCACTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GATGCTGACATGAAGGGACATTTTGATCCTGCCAAGTGCCGCTATGCCCTGGGCATGCAG
                                                                                                                                                                                                                                                                                                      GGCAGACATGTATTTATCTGAGGCCGTGTACCTCAACGACTCCACCTATGACGGACAT
                                                                                                                                                                                                                                                                                                                                                                                             GAGGTGATCTCAGGCAATGAGGACCCTGAGGGAGTGGTGCTGAAGGACCTTGGGCCCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGGCTGCGTTACTCCCGGGATGGTCGCCGCTGGATGGGCTGGAAGGACCGCTGGGGTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CGGCTGCGTTACTCCCGGGATGGTCGCCGCTGGATGGGCTGGAAGGACCGCTGGGGTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCCGCCACAGCAGGTTGGAGAGCAGTGACGGGGATGGGGCCTGGTGCCCCGCAGGGTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GATGCTGACATGAAGGGACATTTTGATCCTGCCAAGTGCCGCTATGCCCTGGGCATGCAG
                                                                                                                                                                                                                                                                                                                                                                                    GAGGTGATCTCAGGCAATGAGGACCCTGAGGGAGTGGTGCTGAAGGACCTTGGGCCCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 1192.2;
Pred. No. 6.4e
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .4e-273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                     1274
                  1020
                                                           960
                                                                                                  900
                                                                                                                                                           1214
                                                                                                                                                                                                   1154
                                                                                                                                                                                                                                          1094
                                                                                                                                                                               780
                                                                                                                                                                                                                       720
                                                                                                                                                                                                                                                                                   1034
                                                                                                                                                                                                                                                                                                                        974
                                                                                                                                                                                                                                                               660
                                                                                                                                                                                                                                                                                                                                            540
                                                                                                                                                                                                                                                                                                                                                                914
                                                                                                                                                                                                                                                                                                                                                                                   4.80
                                                                                                                                                                                                                                                                                                                                                                                                       854
                                                                                                                                                                                                                                                                                                                                                                                                                          420
                                                                                                                                                                                                                                                                                                                                                                                                                                              794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              120
```

```
밁
        S
                                                   밁
                                                                                      Š
                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δõ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JS-08-170-558-7
                                                                                                                                                                                                             Query Match 30.1
Best Local Similarity 99.7
Matches 1194; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                    TELECOMMUNICATION INFORMATION:
TELEPHONE: 415/225-1896
TELEFAX: 415/952-9881
TELEX: 910/371-7168
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 1197 bases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:

MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: patin (Genentech) CURRENT APPLICATION NDATA:

APPLICATION NUMBER: US/08/170,558 FILING DATE: 20-DEC-1993
CLASSIFICATION: 435
PRIOR APPLICATION HOMBAR: 08/157563
APPLICATION NUMBER: 08/157563
APPLICATION NUMBER: 08/157563
APPLICATION NUMBER: 08/157563
APPLICATION HOMBER: 08/157563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 7 Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Baker, Kevin P.
APPLICANT: Baron, Will F.
TITLE OF INVENTION: Protein Tyrosine Kinases
NUMBER OF SEQUENCES: 35
CORRESPONDENCE ADDRESS:
ADDRESSEE: Genentech, Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Godowski, Paul J.
APPLICANT: Mark, Melanie R.
APPLICANT: Scadden, David T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1141 GAGCTGGAGCCCAGAGGCCAGCAGCCCGTGGCCAAGCCCGAGGGGAGCCCGACCGCC 1197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1515 GAGCTGGAGCCCAGAGGCCAGCAGCCCGTGGCCAAGGCCGAGGGGAGCCCGACCGCC 1571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1021 TTCAGCGAAATCTCCTTCATCTCTGATGTGAACAATTCCTCTCCGGCACTGGGAGGC 1080
495 GCCCGCCACAGCAGGTTGGAGGAGCAGTGACGGGGATGGGGCCCTGGTGCCCCGCAGGGTCG 554
                                                                                                                      375 GATGCTGACATGAAGGGACATTTTGATCCTGCCAAGTGCCGCTATGCCCTGGGCATGCAG 434
                                                                                                                                                                                                                                                                                                                                                           STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME: Hasak, Janet E.
REGISTRATION NUMBER: 28
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                       TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           7, Application US/08170558
), 6001621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              T: 460 Point San Bruno Blvd
South San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         94080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            USA
                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                  30.1%; 99.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               28,616
                                                                                                                                                                                                    Score 1192.2; DB 3; Length 1197; Pred. No. 6.4e-273; O; Mismatches 3; Indels 0; Gaps
                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   854C1
                                                                                                                                                                                                          0
```

ဖ်	AGCTGGAGCCCAGAGGCAGCCGGTGGCCAAGCCGGAGGGAG	1141	Дb
– ი	CCGAGGGGAGCCCGAC	1515	Оу
AGCTTG 1	CTTCCCGCCAGCCCCTGGTGGCCGCCTGGCCCACCCACCAACCTTCAGC	1081	DЬ
GCI	CCTTCCCGCCAGCCCCTGGTGGCCGCCTGGCCCACCTCCCACCAACTTCAGCA	1455	Qy
GAGGC	TTCAGCGAAATCTCCTTCATCTCTGATGTGGTGAACAATTCCTCTCCGGCACTGG	1021	Db
AGG	TCAGCGAAATCTCCTTCATCTCTGATGTGGTGAACAATTCCTCTCCGGCACTGG	1395	Qy
TACTC		96	Db ,
Š	GCGGCCGTGTGGCTCTCTCTCTGCAGTGCCGCTTCCTTTTGCCGCCCCCCCTCTGG	w	QΨ
CCTT		901	Db
င်္ဂ	GCCACAACCTAGGGGGCAACCTGGGGGACCCCAGAGCCCGGGCTGTCTCAGTGC	1275	Ϋ́
CAT	GCCGCGTGGAATGTCGCTTCCGGCGTGGCCATGGCCATGGGAGGGGAGGCC	841	망
CAT	орееетваллятетсесттесеестеесствеснатеесствеелеееслеее	1215	Qy
TGCCT	GCCTTCCAGGCTATGCAGGTCCACTGTAACAACATGCACACGCTGGGAGCCCGGTCT	781	뫄
GCCT	CCTTCCAGGCTATGCAGGTCCACTGTAACAACATGCACACGCTGGGAGCCCGTC	1155	Qy
GAG	CAAC	721	В
- 0	GCAACCACAGCTTCTCCAGTGGCTATGTGGAGATGGAGTTTGAGTTTGACCGGC	1095	Qy
ATGG	GATGACTTTAGGAAGAGTCAGGAGCTGCGGGTCTGGCCAGGCTATGACTATGTGGG	661	ф
ATG	ATGACITTAGGAAGAGTCAGGAGCTGCGGGTCTGGCCAGGCTATGACTATGTGG	1035	Qy
GCTG	ACCGTGGGCGGACTGCAGTATGGGGGTCTGGGCCAGCTGGCAGATGGTGTGGTGGC	601	ф
CCI	CCGTGGGCGGACTGCAGTATGGGGGTCTGGGCCAGCTGGCAGATGGTGTGGTGG	975	Qy
ACAT	GGGCAGACAATGTATTTATCTGAGGCCGTGTACCTCAACGACTCCACCTATGACGG	541	DЬ
8	GGCAGACAATGTATTTATCTGAGGCCGTGTACCTCAACGACTCCACCTATGACG	915	Qy
Tere	CGGGTAGAGCTCTATGGCTGCCTCTGGAGGGATGGACTCCTGTCTŢACACCGCCCC	481	뮹
	GGTAGAGCTCTATGGCTGCCTCTGGAGGGATGGACTCCTGTCTTACACCGCCC	855	Qy
TCT	ATGGTTGCCCGACTGGTTCGCTTCTACCCCCGGGCTGACCGGGTCATGAGCGTCTG	421	Db
TCTG	TGGTTGCCCGACTGGTTCGCTTCTACCCCCGGGCTGACCGGGTCATGAGTGTCTC	795	νQ
8=	GAGGTGATCTCAGGCAATGAGGACCCTGAGGGAGTGGTGCTGAAGGACCTTGGGCC	361	DЪ
O.	AGGTGATCTCAGGCAATGAGGACCCTGAGGGAGTGGTGCTGAAGGACCTTGGGC	735	Qy
TCAG	AC-	301	뫄
TCA	GGCTGCGTTACTCCCGGGATGGTCGCCGCTGGATGGGCTGGAAGGACCGCTGGG	675	Qy
CTAC	CTGGTGGGCACCCAGGGACGGCATGCCGGGGGCCTGGGCAAGGAGTTCTCCCGGAG	241	D.
CTA	TGGTGGGCACCCAGGGACGGCATGCCGGGGGCCTGGGCAAGGAGTTCTCCCGGA	615	Qy
GCT	CACCIG	181	Db
ន្ត	TGTTTCCCAAGGAGGAGGAGTACTTGCAGGTGGATCTACAACGACTCCACCTGG	555	γQ
GICG		121	Db

```
밁
                                                                                         δÃ
                                                                                                                  맑
                                                                                                                                      Ş
                                                                                                                                                               문
                                                                                                                                                                                   Ş
   S
                          밁
                                             Ş
                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                               TOPOLOGY: US-08-447-314-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-447-314-7

; Sequence 7, Application US/08447314

; Patent No. 6087144
                                                                                                                                                                                                                                                                                                                                                        TELECOMMUNICATION INFORMATION:
TELEPHONE: 415/225-1896
TELEPAX: 415/952-9881
TELEFAX: 910/371-7168
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 1197 bases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Scadden, L. APPLICANT: Baker, Kevin P. APPLICANT: Baron, Will F. TITLE OF INVENTION: Protein Tyrosine Ki NUMBER OF SEQUENCES: 35
CORRESPONDENCE ADDRESS: ADDRESS: Genentech, Inc.
                                                                                                                                                                                                                                                      Query Match

Best Local Similarity

Matches 1194; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: patin (Genentech)
CURRENT APPLICATION NATA:
APPLICATION NUMBER: US/08/447,314
FILING DATE: 22-MAY-1995
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 08/11
FILING DATE: 23-NOY-1993
ATTORNEY/AGENT INFORMATION:
NAME: HASAK, Janet E.
REGISTRATION NUMBER: 28,6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: 08/170558
FILING DATE: 20-DEC-1993
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: 5.25 inch,
COMPUTER: IBM PC compat.
    675
                                                                      181
                                                                                            555
                                                                                                                  121
                                                                                                                                        495
                                                                                                                                                                                    435
                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STREET: 460 Point San Bruno
CITY: South San Francisco
STATE: California
                                                                                                                                                                                                                                                                                                                                   TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OPERATING SYSTEM:
                                                                                                                                                                                                            Ц
                                                                                                                                                         GATGCTGACATGAAGGGACATTTTGATCCTGCCAAGTGCCGCTATGCCCTGGGCATGCAG
CGGCTGCGTTACTCCCGGGATGGTCGCCGCTGGATGGGCTGGAAGGACCGCTGGGGTCAG
                                 CTGGTGGGCACCCAGGGACGGCATGCCGGGGGCCTGGGCAAGGAGTTCTCCCGGAGCTAC
                                                                GTGTTTCCCAAGGAGGAGGAGTACTTGCAGGTGGATCTACAACGACTCCACCTGGTGGCT
                                                                                                             GCCGCCACAGCAGGTTGGAGAGCAGTGACGGGGATGGGGCCTGGTGCCCCGCAGGGTCG
                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           USA
                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                     30.1%; Score 1192.2; DB 3; 99.7%; Pred. No. 6.4e-273; Live 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   08/157563
                                                                                                                                                                                                                                                                                                                                                                                                                                                    28,616
                                                                                                                                                                                                                                                                                                                                                                                                                                          854C1D2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      360 Kb floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Kinases
                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                         Length
                                                                                                                                                                                                                                                                           1197
                                                                                                                                                                                                                                                    0,
                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                              434
                      300
                                            674
                                                                  240
                                                                                        614
                                                                                                                                    554
                                                                                                                                                                                                       60
                                                                                                              180
                                                                                                                                                                                                                                                  0;
                                                                                                                                                                     밁
                                                                                                                                                                                          Ş
                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                    20
                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                               Qy
                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                          δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δã
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         οy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
```

```
1021
                                                                                                                   1395
                                                                                                                                                                   1335
                                                                                                                                                                                                                                                              1215
                                                                                                                                                                                                                                                                                                            1155
                                                                                                                                                                                                                                                                                                                                                                                                         1035
                                                                                                                                                                                                                 1275
                                                                                                                                                                                                                                                                                                                                                           1095
                                                                                                                                             961
                                                                                                                                                                                                                                        841
                                                                                                                                                                                          901
                                                                                                                                                                                                                                                                                     781
                                                                                                                                                                                                                                                                                                                                                                                  661
                                                                                                                                                                                                                                                                                                                                                                                                                                                        975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                        ACCTTCCCGCCAGCCCCTGGTGGCCGCCTGGCCCACCTCCCAACTTCAGCAGCTTG
                                                        ACCTTCCCGCCAGCCCCTGGTGGCCGCCTGGCCCACCTCCCACCAACTTCAGCAGCTTG
                                                                                          TTCAGCGAAATCTCCTTCATCTCTGATGTGGTGAACAATTCCTCTCCGGCACTGGGAGGC
                                                                                                       TTCAGCGAAATCTCCTTCATCTCTGATGTGGTGAACAATTCCTCTCCGGCACTGGGAGGC
                                                                                                                                                                                                  CGCCACAACCTAGGGGGCAACCTGGGGGACCCCAGAGCCCGGGCTGTCTCAGTGCCCCTT
                                                                                                                                                                                                                                               GGCGGGGTGGAATGTCGCTTCCGGCGTGGCCCTGCCATGGCCTGGGAGGGGGAGGCCCATG
                                                                                                                                                                                                                                                                                GCCTTCCAGGCTATGCAGGTCCACTGTAACAACATGCACACGCTGGGAGCCCGTCTGCCT
                                                                                                                                                                                                                                                                                                                               AGCAACCACAGCTTCTCCAGTGGCTATGTGGAGATGGAGTTTGAGTTTTGACCGGCTGAGG
                                                                                                                                                                                                                                                                                                                                                                             ACCGTGGGCGGACTGCAGTATGGGGGTCTGGGCCAGCTGGCAGATGGTGTGGTGGGGCTG 1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGGCAGACAATGTATTTATCTGAGGCCGTGTACCTCAACGACTCCACCTATGACGGACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGGGTAGAGCTCTATGGCTGCCTCTGGAGGGATGGACTCCTGTCTTACACCGCCCCTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGCCACAACCTAGGGGGCAACCTGGGGGGACCCCAGAGCCCGGGCTGTCTCAGTGCCCCTT
                                                                                                                                                                                                                                    GGCGGGGTGGAATGTCGCCTTCCGGCGTGGCCCTGCCATGGCCTGGGAGGGGGAGCCCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGGTGATCTCAGGCAATGAGGACCCTGAGGGAGTGGTGCTGAAGGACCTTGGGCCCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAGGTGATCTCAGGCAATGAGGACCCTGAGGGAGTGGTGCTGAAGGACCTTGGGCCCCCC
                                             1140
                                                                                            1080
                                                                                                                 1454
                                                                                                                                                                                                             1334
                                                                                                                                         1020
                                                                                                                                                                1394
                                                                                                                                                                                                                                                            1274
                                                                                                                                                                                                                                                                                                          1214
                                                                                                                                                                                                                                                                                                                                                        1154
                                                                                                                                                                                                                                                                                   840
                                                                                                                                                                                       960
                                                                                                                                                                                                                                    900
                                                                                                                                                                                                                                                                                                                                 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  974
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 360
```

RESULT 9
US-08-445-461-7
Sequence 7, Application US/08445461
Sequence 7, Application US/08445461
PARENT NO. 6095527
GENERAL INFORMATION:
APPLICANT: Godowski, Paul J.
APPLICANT: Scadden, David T.
APPLICANT: Baker, Evin P.
APPLICANT: Baron, Will F.
TITLE OF INVENTION: Protein Tyrosine Kinases
NUMBER OF SEQUENCES: 35
CORRESPONDENCE ADDRESS:

```
Matches 1194;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/170558
FILING DATE: 20-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/157563
FILING DATE: 23-NOV-1993
ATTORNEY/AGENT INFORMATION:
NAME: Hasak, Janet E.
REGISTRATION NUMBER: 28,616
REFERENCE/DOCKET NUMBER: 854C3
TRECEDIMENT CATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEX: 910/371-7168
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/445,461
FILING DATE: 22-MAY-1995
CLASSIFICATION: 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: 5.25 inc
COMPUTER: IBM PC comp
                                       795
                                                                                                                                                          675
                                                                                                                                                                                                                                                                                                                                                                                                 435
                                                                    361
                                                                                               735
                                                                                                                              301
                                                                                                                                                                                      241
                                                                                                                                                                                                                     615
                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                             555
                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                         495
                                                                                                                                                                                                                                                                                                                                                                                                                                          375 GATGCTGACATGAAGGGACATTTTGATCCTGCCAAGTGCCGCTATGCCCTGGGCATGCAG 434
                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QUENCE CHARACTERISTICS:
LENGTH: 1197 bases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TELEPHONE: 415/225-1896
TELEFAX: 415/952-9881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE: Genentech, Inc
STREET: 460 Point San Bruu
CITY: South San Francisco
STATE: California
                                                                                                                                                                                                                                                                                                                                                                                                                                Н
                                                                                                                                                                                CTGGTGGGCACCCAGGGACGGCATGCCGGGGGCCTGGGCAAGGAGTTCTCCCGGAGCTAC
   GAGGTGATCTCAGGCAATGAGGACCCTGAGGGAGTGGTGCTGAAGGACCTTGGGCCCCCC
                                                                                                                                         CGGCTGCGTTACTCCCGGGATGGTCGCCGCTGGATGGGCTGGAAGGACCGCTGGGGTCAG
                                                                                                                                                                                                                                                                                                     GACCGGACCATCCCAGACAGTGACATCTCTGCTTCCAGCTCCTGGTCAGATTCCACTGCC
                                                                                                                                                                                                                                                                                                                                                                                GACCGGACCATCCCAGACAGTGACATCTCTGCTTCCAGCTCCTGGTCAGATTCCAGCTGCC 494
                                                                                                                        CGGCTGCGTTACTCCCGGGATGGTCGCCGCTGGATGGGCTGGAAGGACCGCTGGGGTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                        GATGCTGACATGAAGGGACATTTTGATCCTGCCAAGTGCCGCTATGCCCTGGGCATGCAG
                                                            GAGGTGATCTCAGGCAATGAGGACCCTGAGGGAGTGGTGCTGAAGGACCTTGGGCCCCCC
                                                                                                                                                                                                                                             GTGTTTCCCAAGGAGGAGGAGTACTTGCAGGTGGATCTACAACGACTGCACCTGGTGGCT
                                                                                                                                                                                                                                                           GTGTTTCCCAAGGAGGAGGAGTACTTGCAGGTGGATCTACAACGACTCCACCTGGTGGCT
                                                                                                                                                                                                                                                                                                                    GCCCGCCACAGCAGGTTGGAGAGCAGTGACGGGGATGGGGCCTGGTGCCCCCGCAGGGTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           94080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               patin (Genentech)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25 inch,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Inc.
Bruno
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          360 Kb floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 1192.2;
Pred. No. 6.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Blvd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .2; DB 3;
6.4e-273;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 1197;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                       614
                                                                                                                                                                                                                                                                                                                                                                                                                           60
      480
                                  854
                                                            420
                                                                                          794
                                                                                                                        360
                                                                                                                                                  734
                                                                                                                                                                                                                                                                                                                                   554
                                                                                                                                                                                 300
                                                                                                                                                                                                             674
                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                 RESULT 10
US-08-336-343A-3
                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                    Sequence 3, Application US/08336343A Patent No. 5677144
                                                                                                                                                                                                                                     GENERAL INFORMATION:
APPLICANT: Ullrich, Axel
APPLICANT: Alves, Frauke
         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA:
                                                                                                                                                                                           TITLE OF INVENTION: CCK-2, NUMBER OF SEQUENCES: 43 CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                             1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1455
                                                                                                                                                                                                                                                                                                                                                                                                                                          1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1095
                                                                                                  STATE: New York COUNTRY: U.S.A. ZIP: 10036-2711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1035
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            781
                                                                                                                                 ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the &
CITY: New York
STATE: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                          CGCCACAACCTAGGGGGCAACCTGGGGGACCCCAGAGCCCGGGCTGTCTCAGTGCCCCTT 1334
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCTTCCCGCCAGCCCCTGGTGGCCGCCTGGCCCACCTCCCACCTACTTCAGCAGCTTG 1514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCCGCCCGTGTGGCTCCCTTTCTGCAGTGCCCGCTTCCTTTGCGGGGCCCCTGGTTACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCITCCCGCCAGCCCCTGGTGGCCGCCTGGCCCACCTCCCACCAACTTCAGCAGCTTG 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTCAGCGAAATCTCCTTCATCTCTGATGTGGTGAACAATTCCTCTCCGGCACTGGGAGGC 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTCAGCGAAATCTCCTTCATCTCTGATGTGGTGAACAATTCCTCTCCGGCACTGGGAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGCGGCCGTGTGGCTTTCTGCAGTGCCGCTTCCTCTTTGCGGGGCCCTGGTTACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGCAACCACAGCTTCTCCAGTGGCTATGTGGAGATGGAGTTTGAGTTTGACCGGCTGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGGCAGACAATGTATTTATCTGAGGCCGTGTACCTCAACGACTCCACCTATGACGGACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGCGGGGTGGAATGTCGCTTCCGGCGTGGCCCTGCCATGGCCTGGGAGGGGGAGCCCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCGTGGGCGGACTGCAGTATGGGGGGTCTGGGCCAGCTGGCAGATGGTGTGGTGGGGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGGCAGACAATGTATTTATCTGAGGCCGTGTACCTCAACGACTCCACCTATGACGGACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGGGTAGAGCTCTATGGCTGCCTCTGGAGGGATGGACTCCTGTCTTACACCGCCCCTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGGGTAGAGCTCTATGGCTGCCTCTGGAGGGATGGACTCCTGTCTTACACCGCCCCTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCGTGGGCGGACTGCAGTATGGGGGGTCTGGGCCAGCTGGCAGATGGTGGTGGGGGCTG
                          PatentIn Release #1.0, Version
US/08/336,3438
                                                                                                                                                                                                                        A No. 5677144el Receptor Tyrosine Kinase
                                                                                                                                                                Americas
                               #1.30
```

1394 1020

1274 900

1154

720

780

1094

660

1034

974

540 914

600

밁 8 В QY В δÃ 밁 δÃ р δÃ Вb Ş B δÃ Вþ

```
Ş
                                                                                               Š
     밁
                                                                   밁
                                                                                                                                  밁
                                                                                                                                                               Ş
                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                   Š
                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; NAME/KEY:
; LOCATION:
US-08-336-343A-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 16.2%;
Best Local Similarity 56.5%;
Matches 1534; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELEX: 66141 PENNIE INFORMATION FOR SEQ ID NO: 3:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME: COTUZZI, LAUTA A.
REGISTRATION NUMBER: 30,742
REFERENCE/DOCKET NUMBER: 7683-065
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEPAX: (212) 869-9741/8864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE: CD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS:
LENGTH: 3157 base pairs
                                                                                                                                                                                                                                                                                                                                                                   646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ANTI-SENSE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTORNEY/AGENT INFORMATION:
     995
                                                                                                                                     875
                                                                                                                                                                                                                                     766
                                                                                                                                                                                                                                                                      755
                                                                                                                                                                                                                                                                                                                                      695
                                                                                                                                                                                                                                                                                                                                                                                                        635
                                                                                                                                                                                                                                                                                                                                                                                                                                       586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          575
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         469
                                                                                                                                                                                                                                                                                                     706
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRANDEDNESS: both
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 08-NOV-1994-
CLASSIFICATION: 435
                                                                                             ATGGACTCCTGTCTTACACCGCCCCTGTGGGGCAGACAATGTATTTATCTGAGG-----
                               CCGTGTACCTCAACGACTCCACCTATGACGGACATACCGTGGGCGGACTGCAGTATGGGG
                                                                                                                              TCACCGACCACTCCATGAATGTGTGTATGAGAGTGGAGCTTTACGGCTGTGTCTGGCTAG
                                                                                                                                                 GGGCTGACCGGGTCATGAGTGTCTGTCTGCGGGTAGAGCCTCTATGGCTGCCTCTGGAGGG
                                                                                                                                                                                              ACATTTTCCTAAAGGACTTGGAGCCGCCCATTGTAGCCAGATTTGTCCGGTTCATTCCAG
                                                                                                                                                                                                                                                                                                                                                    CCTGGGCAAGGAGTTCTCCCGGAGCTACCGGCTGCGTTACTCCCGGGATGGTCGCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                    TGGATCTACAACGACTCCAGCTGGTGGCTCTGGTGGGCACCCAGGGACGGCATGCCGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATGGGGCCTGGTGCCCCGCAGGGTCGGTGTTTCCCAAGGA----GGAGGAGTACTTGCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCAGCTCCTGGTCAGATTCCACTGCCGCCGCCACAGCAGCAGGTTGGAGGAGCAGTGACGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TATGCCGCTATCCTCTGGGCATGTCAGGAGGCCAGATTCCAGATGAGGACATCACAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGTGCCGCTATGCCCTGGGCATGCAGGACCGGACCATCCCAGACAGTGACATCTCTCTGCTT 468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGCTGCTGCTCTTGGTGGCAAGTGGAGATGCTGACATGAAGGGACATTTTGATCCTGCCA 408
TCATTTATCTGAATGATTCTGTCTATGATGGAGCTGTTGGATACAGCATGACAGAAGGG-
                                                                ATGGCTTGGTGTCTTACAATGCTCCAGCTGGGCAGCAGTTTGTACTCCCTGGAGGTTCCA
                                                                                                                                                                                                                               GAGTGGTGCTGAAGGACCTTGGGCCCCCCATGGTTGCCCGACTGGTTCGCTTCTACCCCC
                                                                                                                                                                                                                                                                  GGATGGGCTGGAAGGACCGCTGGGGTCAGGAGGTGATCTCAGGCAATGAGGACCCTGAGG
                                                                                                                                                                                                                                                                                                                                 GTCATGGCATCGAGTTTGCCCCCCATGTACAAGATCAATTACAGTCGGGATGGCACTCGCT
                                                                                                                                                                                                                                                                                                                                                                                                  TTGACTTGCACACCCTCCATTTTATCACTCTGGTGGGGACCCAGGGGGCGCCATGCAGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATGGAGCCTGGTGCCCTGAGATTCCAGTGGAACCTGATGACCTGAAGGAGTTTCTGCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCAGTCAGTGGTCAGAGTCCACAGCTGCCAAATATGGAAGGCTGGACTCAGAAGAAGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CDS
370..2934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ğ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 642; DB 1; I
Pred. No. 1.4e-142;
0; Mismatches 975;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 3157;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels 207;
```

514

1053

934 885 874 825 814 765 754 705 694 645 634

939

Gaps

10;

```
Š
QΥ
                                                                                               밁
                                                                                                                           Ş
                                                                                                                                                           뫄
                                                                                                                                                                                     Qy
                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                   Qγ
                                                                                                                                                                                                                                                                                                                                                                              Q
                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20
                               밁
                                                                                                                                                                                                                                                      Š
                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                             β
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QΥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20
                                                                                                                                                            1805
                                                                                                                                                                                          1900
                                                                                                                                                                                                                          1795
                                                                                                                                                                                                                                                         1840
                                                                                                                                                                                                                                                                                        1748
 2080
                                                                                                                                                                                                                                                                                                                                                    1715
                                                                                                                                                                                                                                                                                                                                                                                   1720
                                                                                                                                                                                                                                                                                                                                                                                                                   1655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1172
                                                   CCCATTATGCCGAGGCTGACATTGTTACCCTGCAGGGCGTCACCGGGGGCCAACACCTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ·--CTAGGCCAATTGACCGATGGTGTGTCTGGCCTGGACGATTTCACCCAGACCCATGAAT 1111
CTGTGCCTGCACTGCCCCCAGGGGCAGTC---GGGGATGGGCCCCCCAGAGTGGATTTCC 2136
                                                                                                                                                                                                                                                                                                                                                                                GGGACACTATCCTCATCAACAACCGCCCAGGTCCTAGAGAGCCACCCCCGTACCAGGAGC 1779
                                                                                                                                                                                                                                                                                                                                                                                                                                TCAGCAAGGCTGAACGGAGGGTGTTGGAAGGAGGAGCTGACGGTTCACCTCTCTGTCCCTG 1719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGGACCCCAGAGCCCGGGCTGTCTCAGTGCCCCTTGGCGGCCGTGTGGCTCGCTTTCTGC 1359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTAACAACATGCACACGCTGGGAGCCCGTCTGCCTGGCGGGGTGGAATGTCGCTTCCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTCTGGGCCAGCTGGCAGATGGTGTGGTGGGGGGCTGGATGACTTTTAGGAAGAGTCAGGAGC
                            CCCACTATGCAGAGGCTGACATAGTGAACCTCCAAGGAGTGACAGGAGGCAACACATACT
                                                                                            AGGAGTCAGGCTGCAGCGGTGTTGTGAAGCCAGTCCAGCCCAGTGGCCCTGAGGGGGTGC
                                                                                                                                                                                       CGGGCCCCCACACCCGCCTGGGCCAAACCCCACCAACACCCAGGCCTACAGTGGGGACT
                                                                                                                                                                                                                                                                                     CATCACCTAGTGAACAAGGGTCCAACTCGACTTACGATCGCATCTTT------
                                                                                                                                                                                                                                                                                                                                                  GIGATICTAGCATGITCAACAAT------AACCGCTCCT 1747
                                                                                                                                                                                                                                                                                                                                                                                                               TGGAGAAGGCTTCTCGGAGGATGCTGGATGAATGACAGTCAGCCTTTCCCTGCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCTGCTGCTGCTCATCATTGCCCTCATGCTCTGGCGGCTGCACTGGCGCAGGCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAATGCTTAAAGTTGATGACAGCAACACTCGGATCCTGATTGGCTGCTTGGTGGCCATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGCCTGGCCCACCTCCCACCAACTTCAGCAGCTTGGAGCTGGAGCCCAGAGGCCAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATGTGGTGAACAATTCCTCTCCGGCACTGGGAGGCACCTTCCCGCCAGCCCCCTGGTGGC 1479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCAACCCCAGTGCTCGGTTTGTCACGGTGCCTCTCCACCACCGAATGGCCAGTGCCATCA 1408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTGGCCCTGCCATGGCCTGGGAGGGGGAGCCCATGCGCCACAACCTAGGGGGCAACCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCAACAACATGTTTGCTAAAGGTGTGAAGATCTTTAAGGAGGTACAGTGCTACTTCCGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGCGGGTCTGGCCAGGCTATGACTATGTGGGATGGAGCAACCACAGCTTCTCCAGTGGCT 1119
                                                                                                                           ATATGGAGCCTGAGAAGCCAGGCGCCCCGCTTCTGCCCCACCTCCCCAGAACAGCGTCC
                                                                                                                                                         CTGACTACCAGGAGCCATCCAGGCTGATACGAAAACTCCCAGAATTTGCTCCAGGGGAGG
                                                                                                                                                                                                                                                      TGCTCTCCAATCCAGCCTACCGCCTCCTTCTGGCCACTTACGCCCGTCCCCCTCGAGGCC 1899
                                                                                                                                                                                                                                                                                                                 CCCGGCCTCGTGGGAATCCGCCCACTCCGCTCCCTGTGTCCCCAATGGCTCTGCGTTGC 1839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCTTTATCCTCCTGGCCATCATTGTCATCATCCTCTGGAGGCAGTTCTGGCAGAAAATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATGCTGCAATGTACAACAACTCTGAAGCCCTGCCCACCTCTCCTA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCACGTGTGGCCCGGCTATGACTATGTGGGCTGGCGGAACGAGAGTGCCACCAATGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGGCACCCACAACCTATGATC
                                                                                                                                                                                         1959
                                                           2079
                                                                                                                                                         1864
                                                                                            1924
                                                                                                                           2019
                                                                                                                                                                                                                        1804
                                                                                                                                                                                                                                                                                     1794
                                                                                                                                                                                                                                                                                                                                                                                                               1714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1231
```

```
RESULT 11
US-08-336-343A-5/c
(S-Gequence 5, Application U
Patent No. 5677144
GENERAL INFORMATION:
                                                                                                                                       2900
                                                                                                                                                                                                                                                                                 2780
                                                                                                                                                                                                                                                                                                                    2917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1985
                                                                                                                                                                                                                                     TATATGAGCTGATGCTTCGGTGCTGGAGCCGGGAGTCTGAGCAGCGACCACCCTTTTCCC
                                                                                                                                    AAATCCACCTTCTGCT
                                                                                                                                                                     AGCTGCATCGGTTCCT
                                                                                                                                                                                                                                                                        TCTTCCGAGACCAAGGGAGGCAGACTTACCTCCCTCAACCAGCCATTTGTCCTGACTCTG
                                                                                                                                                                                                                                                                                                 GTCAAGAACAGCCCTATTCCCAGCTGTCAGATGAACAGGTTATTGAGAATACTGGAGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                      TCACGACTGCGAGTGACGTGTGGGCCTTTTGGTGTGACCCTGTGGGAGGTGCTGATGCTCT
                                                                                                                                                                                                    TGTATAAGCTGATGCTCAGCTGCTGGAGAAGAAGAAACCGGTCCCTCATTCCAAG
                                                                                                                                                                                                                                                                                                                                                                  GTAGGGCCCAGCCCTTTGGGCAGCTCACCGACGAGGTCATCGAGAACGCGGGGGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                 TCACTACAGCAAGTGATGTGTGGGGCCTTTGGGGGTTACTTTGTGGGAGACTTTCACCTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGGGCCGGCAGTGCTCCCTATCCGCTGGATGTCTTGGGAGAGTATCTTGCTGGGCAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGGGCCGGGCAGTGCTGCATCCGCTGGATGGCCTGGGAGTGCATCCTCATGGGGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCAAGATAGCTGACTTTGGAATGAGCAGGAACCTGTACAGTGGTGACTATTACCGGATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCAAAATCGCAGACTTTGGCATGAGCCGGAACCTCTATGCTGGGGAGTATTACCGTGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTAATTTTGTTCACCGAGATCTGGCCACACGAAACTGTTTAGTGGGTAAGAACTACACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCAACTTTGTACATCGGGACCTGGCCACGCGAACTGCCTAGTTGGGGAAAATTTCACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCCAATGCTGCTGCATGTGGCAGCCCAGATCGCCTCCGGCATGCGCCTATCTGGCCACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTACTGACTACATGGAGAACGGCGACCTCAACCAGTTCCTCAGTGCCCACCAGCTGGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACAAGGCAGCCGAGGGGCCCCTGGGGACGGGCAGGCTGCGCAGGGGGCCCCACCATCAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCTTCTCCTTGTTCTCCAGGAATGÅTTTCCTGAAAGAGGTGAAGATCATGTCGAGGCTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACACCAATCTGAAGTTTATGGCTACCCAAATTGCCTCTGGCATGAAGTACCTTTCCTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGGACCCAAACATCATCCATCTATTATCTGTGTGTATCACTGATGACCCTCTCTGTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCAACCAGCCTGTCGTGAAAATGCTCCGAGCAGATGCCAACAAGAATG----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGGGACACCCTTTGCTGGTAGCTGTCAAGATCTTACGGCCAGATGCCACCAAGAATGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCTGTGAAGTGGAAGGAATGGAAAAATTCAAAGACAAAGATTTTGCCCTAGATGTCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGTGTGAGGTCGACAGCCCCTCAAGATCTGGTCAGTCTTGATTTCCCCCCTTAATGTGCGTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCAGGAAACTCCTAACTTTCAAAGAGAAGCTGGGAGAAGGACAGTTTGGGGGAGGTTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTCGATCTCGACTCCGCCTTCAAGGAGAACCTTGGGGAGGGCCAGGTTTGGGGAGGTGCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -----CCAGGAATGATTTTCTTAAGGAGATAAAGATCATGTCTCGGCTCA
                                             US/08336343A
                                                                                                                                                                      3052
                                                                                                                                     2915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -----ATGTACGCACTGTCAGTT
                                                                                                                                                                                                                                       3036
                                                                                                                                                                                                                                                                                                                                                                                2916
                                                                                                                                                                                                                                                                                                                                                                                                                 2719
                                                                                                                                                                                                                                                                                                                                                                                                                                                    2856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2796
                                                                                                                                                                                                                                                                                                                                             2779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2044
                                        В
                                                                       Š
                                                                                                            밁
                                                                                                                                         Ş
                                                                                                                                                                                 멍
                                                                                                                                                                                                                 Ωy
                                                                                                                                                                                                                                                                             ٠.٥
                                                                                                                                                                                                                                                                                                                         뮰
                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                              Š
                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; ANTI-SENSE: US-08-336-343A-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 1534; Conserv
                                        2403
                                                                                                            2463
                                                                                                                                                                                 2523
                                                                                                                                                                                                                                                     2583
                                                                                                                                                                                                                                                                                                                         2643
                                                                                                                                                                                                                                                                                                                                                                                        2703 TATGCCGCTATCCTCTGGGCATGTCAGGAGGCCAGATTCCAGATGAGGACATCACAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HYPOTHETICAL:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE:
                                                                                                                                               646
                                                                                                                                                                                                                                                                                      529
                                                                                                                                                                                                                                                                                                                                                            469
                                                                                                                                                                                                                                                                                                                                                                                                                                  409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STATE: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY: U.S.A.
ZIP: 10036-2711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE:
GAGTGGTGCTGAAGGACCTTGGGCCCCCCATGGTTGCCCGACTGGTTCGCTTCTACCCCC
                                                       GGATGGGCTGGAAGGACCGCTGGGGTCAGGAGGTGATCTCAGGCAATGAGGACCCTGAGG 765
                                                                                                    GTCATGGCATCGAGTTTGCCCCCATGTACAAGATCAATTACAGTCGGGATGGCACTCGCT 240
                                                                                                                              GCCTGGGCAAGGAGTTCTCCCGGAGCTACCGGCTGCGTTACTCCCGGGATGGTCGCCGCT 705
                                                                                                                                                                                              TGGATCTACAACGACTCCACCTGGTGGCTCTGGTGGCACCCAGGGACGGCATGCCCGGGG
                                                                                                                                                                                                                                                                               ATGGGGCCTGGTGCCCCGCAGGGTCGGTGTTTCCCAAGGA---GGAGGAGTACTTGCAGG 585
                                                                                                                                                                                                                                                                                                                    CCAGTCAGTGGTCAGAGTCCACAGCTGCCAAATATGGAAGGCTGGACTCAGAAGAAGGGG
                                                                                                                                                                                                                                                                                                                                            CCAGCTCCTGGTCAGATTCCACTGCCGCCCCCCCACAGCAGTTGGAGAGCAGTGACGGGG
                                                                                                                                                                            TTGACTTGCACACCCTCCATTTTATCACTCTGGTGGGGACCCAGGGGGCGCCATGCAGGAG
                                                                                                                                                                                                                                                  ATGGAGCCTGGTGCCCTGAGATTCCAGTGGAACCTGATGACCTGAAGGAGTTTCTGCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CDNA
```

멍 Š 밁 QУ Дb δÃ 밁 Ş 망 Š 밁 Š 밁 δõ В Š В δÃ Вþ δõ 밁 δ 밁 Ş В 20 Вb 20 ДЬ Š 멍 Š B

2344 825

2464

2524

645

2584

528

2644

10;

TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-9741/8864
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 3157 base pairs ATTORNEY/AGENT INFORMATION:

NAME: COTNEZ1, Laura A.

REGISTRATION NUMBER: 30,742

REFERENCE/DOCKET NUMBER: 7683

TELECOMMUNICATION INFORMATION:

TELEPHONE: (212) 790-9090

TELEPHONE: (212) 790-9090 COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOTTWARE: Patentin Release #1.0,
CURRENT APPLICATION DATA: COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk APPLICANT: Ullrich, Axel APPLICANT: Alves, Frauke TITLE OF INVENTION: CCK-2, NUMBER OF SEQUENCES: 43
CORRESPONDENCE ADDRESS: 349 TGCTGCTGCTCTTGGTGGCAAGTGGAGATGCTGACATGAAGGGACATTTTGATCCTGCCA 408 STRANDEDNESS: double APPLICATION NUMBER: US/08/336,343A AGTGCCGCTATGCCCTGGGCATGCAGGACCGGACCATCCCAGACAGTGACATCTCTCTGCTT 468 TGGTGCTGTTCCTGCTGCCTATCTTGAGTTCTGCAAAAGCTCAGGTTAATCCAGCTA 2704 1155 Avenue of the Americas Conservative Pennie & Edmonds 08-NOV-1994 16.2%; 0; 7683-065 A No. Score 642; DB 1; Pred. No. 1.4e-142; O; Mismatches 975; 5677144el Version Receptor Length 3157; Indels Tyrosine 207; Kinase Gaps

1840 TGCTCTCCAATCCAGCCTACCGCCTCCTTCTGGCCACTTACGCCCGTCCCCCCCGAGGCC 1899	1780 CCCGGCCTCGTGGGAATCCGCCCACTCCGCTCCCTGTGTCCCAATGGCTCTGCGTTGC 1839	1720 GGGACACTATCCTCATCAACAACCGCCCAGGTCCTAGAGAGCCACCCCCGTACCAGGAGC 1779	1660 TCAGCAAGGCTGAACGGAGGTGTTGGAAGAAGAAGCTGACGGTTCACCTCTCTCT		1540 CCGTGGCCAAGGCCGAGGGGAGCCCGACCGCCATCCGTCATCGGCTGCCTGGTGGCCATCA 1599	1480 CGCCTGGCCCACCTCCCACCAACTTCAGCAGCTTGGAGCTGGAGCCCAGAGGCCAGCAGC 1539 1644	1420 ATGTGGTGAACAATTCCTCTCCGGCACTGGGAGGCACCTTCCCGGCAGCCCCCTGGTGGC 1479	1360 AGTGCCGCTTCCTCTTTGCGGGGGCCCTGGTTACTCTTCAGCGAAAATCTCCCTTCATCTCTG 1419	1300 GGGACCCCAGAGCCCGGGCTGTCTCAGTGCCCCTTGGCCGGCTGTGGCTCGCTTTCTGC 1359	1240 GTGGCCCTGCCATGGCCTGGGAGGGGGGAGCCCATGCGCCACCTAGGGGGCAACCTGG 1299	1180 GTAACAACATGCACACGCTGGGAGGCCCGTCTGCCTGGCGGGGTGGAATGTCGCCTTCCGGC 1239	1120 ATGTGGAGATGGAGTTTGAGTTTGACCGGCTGAGGGCCTTCCAGGCTATGCAGGTCCACT 1179	1060 TGCGGGTCTGGCCAGGCTATGACTATGTGGGATGGAGCAACCACAGCTTCTCCAGTGGCT 1119	1000 GTCTGGGCCAGCTGGCAGATGGTGTGGTGGGCTGGATGACTTTAGGAAGAGTCAGGAGC 1059	940 CCGTGTACCTCAACGACTCCACCTATGACGGACATACCGTGGGCGGACTGCAGTATGGGG 999 	886 ATGGACTCCTGTCTTACACCGCCCCTGTGGGGCAGACAATGTATTTATCTGAGG 939	826 GGCTGACCGGGTCATGAGTGTCTGTCTGCGGGTAGAGCTCTATGGCTGCCTCTGGAGGG 885	
		······································		-		<u>-</u>							·			· · · · · · · · · · · · · · · · · · ·		
Db Qy	Db Qy	. B 9	Qy Db	Оy	Db Qy	ОУ	рь	рb	pb dy	p 04	Db Qy	Db Oy	Db Qy	ob dy	pb Qy	dd dy	D 4	Db
2917 TCTTCCGGGACCAGGCCGGCAGGTGTACCTGTCCCGGCCGCCTGCCCTGCCCGCAGGGCC 2976	2857 GTAGGGCCCAGCCCTTTGGGCAGCTCACCGAGCAGGTCATCGAGAACGCGGGGGAGT 2916	2797 TCACGACTGCGAGTGACGTGTGGGCCTTTGGTGTGACCCTGTGGGAGGTGCTGATGCTCT 2856	2737 AGGGCCGGGCAGTGCTGCCCATCCGCTGGATGGCCTGGGAGTGCATCCTCATGGGGAAGT 2796	2677 TCAAAATCGCAGACTTTGGCATGAGCCGGAACCTCTATGCTGGGGGACTATTACCGTGTGC 2736	2617 TCAACTTTGTACATCGGGACCTGGCCACGCGGAACTGCCTAGTTGGGGAAAATTTCACCA 2676	2557 ACCCAATGCTGCTGCATGTGGCAGCCCAGATCGCCTCCGGCATGCGCCTATCTGGCCACAC 2616	2497 ACAAGGCAGCCGAGGGGCCCCTGGGGACGGGCAGGCTGCGCAGGGGCCCACCATCAGCT 2556	2437 TTACTGACTACATGGAGAACGGCGACCTCAACCAGTTCCTCAGTGCCCACCAGCTGGAGG 2496		GCTTCTCCTGTTCTCCAGGAATGATTTCCTGAAAGAGGTGAAGATCATGTCGAGGCTCA	AGGACACCCTTTGCTGGTAGCTGTCAAGATCTTACGGCCAGATGCCACCAAGAATGCCA			CTGTGCCTGCACTGCCCCCAGGGGCAGCTCGGGGATGGCCCCCCAGAGTGGATTCC	CCCATTATGCGAGGCTGACATGTACCCTGCAGGGCGTCACGGGGGAACACCTATG	ATATEGASCCTGAGAAGCCAGGCCCCCCCCCCCCCCCCAGACACCGTCCCCCAGACACCGCTCCCCAGACACCGCCTCCAGCCAGCCAGCCCAGCCCAGCCCAGCCCAGCCCAGCCCAGCCCAGCCCAGCCCAGCCCAGCCCAGCCCAGCCAGCCCAGCCCAGCCCAGCCCAGCCCAGCCCAGCCCAGCCCAGCCCAGCCCAGCCCAGCCCAGCCAGCCCAGCCCAGCCCAGCCCAGCCCAGCCCAGCCCAGCCCAGCCCAGCCCAGCCCAGCCCAGCCAGCCCAGCCCAGCCCAGCCCAGCCCAGCCCAGCCCAGCCCAGCCCAGCCCAGCCCAGCCCAGCCAGCCCAGCCCAGCCCAGCCCAGCCCAGCCCAGCCCAGCCAGCCCAGCCCAGCCCAGCCCAGCCCAGCCCAGCCAGCCAGCCAGCCAGCCAGCCAGCCAGCCAGCCAGCCAGCCAGCCAGCAAAAAA	CTGACTACCAGGAGCCATCCAGGCTGATACGAAAACTCCCAGAATTTGCTCCAGGGAGG	

Ş

Ş

문

Ş

밁

Š

밁 Α 유 Ş 밁

밁

Š

멂 S 밁 δÃ 유 Ş 밁 S Š

문

맑

Ş В δ

밁

```
US-08-456-647B-19
                                                                                                                                          Query Match
Best Local Similarity
Matches 1552; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 19, Application US/08456647B Patent No. 5811516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 08/237,401
FILLING DATE: 02-MAY-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/884,486
FILLING DATE: 15-MAY-1992
ATTORNEY/AGENT INFORMATION:
NAME: Wethereil Ph.D., John R.
REGISTRATION NUMBER: 31,678.
REFERENCE/DOCKET NUMBER: 07251/0070
TELEPHONE: (619) 678-5070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: Patentin Relea
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/C
FILING DATE: 02-UN-1999
CLASSIFICATION: 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: (619) 678-50 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                 MOLECULE TYPE: I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Lemke Ph.D. et ail, Greg E.
TITLE OF INVENTION: PROTEIN-TYROSINE KINASE GENES
NUMBER OF SEQUENCES: 54
CORRESPONDENCE ADDRESS:
ADDRESS:
                                                                                                                                                                                                                                                                                                FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
LENGTH: 3120 base pairs
                                       408
                                                                          509
                                                                                         348 CTGCTGCTGCTCTTGGTGGCAAGTGGAGATGCTGACATGAAGGGACATTTTGATCCTGCC 407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2977 TATATGAGCTGATGCTTCGGTGCTGGAGCCGGGAGTCTGAGCAGCGACCACCCTTTTCCC
                                                                                                                                                                                                                                                                                                                 CLONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COUNTRY: U
ZIP: 92037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: La Jolla
STATE: CA
                                                                                                                                                                                                                                                                             NAME/KEY:
                                                                                                                                                                                                                                                                                                                                                                                    STRANDEDNESS:
                                                                                                                                                                                                                                                          LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE:
                   AAGTGCCGCTATGCCCTGGGCATGCAGGACCGGACCATCCCAGACAGTGACATCTCTGCT 467
ATATGCCGCTATCCTCTGGGCATGTCAGGAGGCCACATTCCAGATGAGGACATCACAGCC
                                                                      CTGGTGCTCCTGCTCTTGCTCATCCTGGGTTCTGCAAAAGCTCAGGTTAATCCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAATCCACCTTCTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGTATAAGCTGATGCTCAGCTGCTGGAGAAGAAGAACAAGAACCGTCCCTCATTCCAAG 259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGCTGCATCGGTTCCT 3052
                                                                                                                                                                                                                                                                                                                                                                                                       nucleic acid
                                                                                                                                                                                                                                                                                                                Tyro-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4225 Executive Square,
                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Patentin Release #1.0,
                                                                                                                                                                                                                                                          485..3047
                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Fish & Richardson P.C.
25 Executive Square, Suite
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          02-JUN-1995
                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                    single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             678-5099
                                                                                                                                                             16.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US/08/456,647B
                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07251/007002
                                                                                                                                          Score 639.8; DB 1;
Pred. No. 4.5e-142;
0; Mismatches 987;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1400
                                                                                                                                          Indels 210;
                                                                                                                                                                            Length 3120;
                                                                                                                                        Gaps
                                                                      568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3036
                                                                                                                                          11;
                                                                                     밁
                                                                                                                                                           В
                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                    QY
                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                            Ş
               밁
                                                 δõ
                                                                                                                     Š
                                                                                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Qγ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ωy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q
               1629
                                                 1479
                                                                                     1583
                                                                                                                                                           1523
                                                                                                                                                                                                                                  1463
                                                                                                                                                                                                                                                                                                                                            1239
                                                                                                                                                                                                                                                                                                                                                                                                                1179
                                                                                                                                                                                                                                                                      1299
                                                                                                                                                                                                                                                                                                          1406
                                                                                                                                                                                                                                                                                                                                                                                1346
                                                                                                                                                                                                                                                                                                                                                                                                                                                        1286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1109 ATCATTTATCTGAATGATTCTGTCTATGATGGAGCTGTTGGGTACAGCATGACTGAAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           705 TGGATGGGCTGGAAGGACCGCTGGGGTCAGGAGGTGATCTCAGGCAATGAGGACCCTGAG 764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        869 TGGATCTCCTGGCGTAACCGGCATGGGAAGCAGGTGCTTGATGGAAACAGTAACCCTTAT 928
                                                                                                                                                        AGTGCCAATACCATTTTGCCGACACGTGGATGATGTTCAGCGAGATCACTTTCCAATCA 1582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TACCACGTGTGGCCTGGCTATGACTACGTGGGATGGCGGAACGAAAGTGCTACCAACGGT 1285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GATGGACTCCTGTCTTACACCGCCCCTGTGGGGCAGACAATGTATTTATCTGAGG-----
                                                                                                                                                                                            CAGTGCCGCTTCCTCTTTGCGGGGCCCCTGGTTACTCTTCAGCGAAATCTCCTTCATCTCT 1418
                                                                                                                                                                                                                              TATGTGGAGATGGAGTTTGAGTTTGACCGGCTGAGGGCCCTTCCAGGCTATGCAGGTCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTGCGGGTCTGGCCAGGCTATGACTATGTGGGATGGAGCAACCACAGCTTCTCCAGTGGC 1118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGTCTGGGCCAGCTGGCAGATGGTGTGGTGGGGGCTGGATGACTTTAGGAAGAGTCAGGAG 1058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTCACTGACCACTCCATGAACGTGTGCATGAGGGTTGAGCTTTATGGTTGTGTCTGGCTA 1048
                                             CCGCCTGGCCCACCTCCCACCAACTTCAGCAGCTTGGAGCTGGAGCCCAGAGGCCAGCAG 1538
                                                                                 GATGCTGCAATGTATAACAACTCTGGAGCCCTTCCCACCTCTCCTA----
                                                                                                                   GATGTGGTGAACAATTCCTCTCCGGCACTGGGAGGCACCTTCCCGCCAGCCCCCCTGGTGG 1478
                                                                                                                                                                                                                                                                GGGGACCCCAGAGCCCGGGCTGTCTCAGTGCCCCTTGGCGGCCGTGTGGCTCGCTTTCTG
                                                                                                                                                                                                                                                                                                      TCGG---AAGCCAGCGAGTGGGAACCCACTGCTGTCTACTTTCCCCTGGTCCTGGACGAT
                                                                                                                                                                                                                                                                                                                                        CGTGGCCCTGCCATGGCCTGGGAGGGGGAGCCCATGCGCCACAACCTAGGGGGGCAACCTG 1298
                                                                                                                                                                                                                                                                                                                                                                            TGCAACAACATGTTTGCTAAAAGGTGTGAAGATTTTTAAGGAGGTCCAGTGCTACTTTCGC
                                                                                                                                                                                                                                                                                                                                                                                                               TGTAACAACATGCACACGCTGGGAGCCCGTCTGCCTGGCGGGGGTGGAATGTCGCTTCCGG 1238
                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTCATTGAGATCATGTTTGAATTTGACCGAATCAGGAATTTTACTACCATGAAGGTCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ---CTAGGCCAGTTGACTGATGGAGTATCCGGCCTGGATGATTTTACCCAGACCCATGAA 1225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -CCGTGTACCTCAACGACTCCACCTATGACGGACATACCGTGGGGGGGACTGCAGTATGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GATGGCTTGGTATCCTACAATGCTCCAGCTGGACAGCAGTTTGTACTCCCTGGAGGCTCC 1108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGGGCTGACCGGGTCATGAGTGTCTGTCTGCGGGTAGAGCTCTATGGCTTGCCTCTGGAGG 884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GATGTATTCCTGAAGGACTTGGAGCCACCCATCGTCGCCAGATTTGTTCGCCTTATCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGAGTGGTGCTGAAGGACCTTGGGCCCCCCATGGTTGCCCGACTGGTTCGCTTCTACCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTGACTTGCGAACCCTACACTTTATCACTCTTGTGGGGACCCAGGGGCGCCATGCAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GATGGGGCCTGGTGCCCCGCAGGGTCGTGTTTCCCAAGGA---GGAGGAGTACTTGCAG 584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGTCATGGCATTGAATTTGCACCCATGTACAAGATCAACTACAGTCGGGATGGCAGTCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGCCTGGGCAAGGAGTTCTCCCGGAGCTACCGGCTTACTCCCGGGATGGTCGCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGGATCTACAACGACTCCACCTGGTGGCTCTGGTGGGCACCCAGGGACGGCATGCCGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GATGGAGCCTGGTGTCCTGAGATTCCAGTGCAACCCGATGACCTGAAGGAATTTCTGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCAGCTCCTGGTCAGATTCCACTGCCGCCCCCCCACAGCAGGTTGGAGAGCAGTGACGGG
           TGGCACCCACCACCTATGAT 1648
                                                                                 1628
                                                                                                                                                                                                                                                                  1358
                                                                                                                                                                                                                                                                                                      1462
                                                                                                                                                                                                                                                                                                                                                                            1405
                                                                                                                                                                                                                                1522
                                                                                                                                                                                                                                                                                                                                                                                                                                                     1345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 748
```

Š 밁

В 80

```
Ş
                                      밁
                                                              Ş
                                                                                             밁
                                                                                                                     Š
                                                                                                                                                      밁
                                                                                                                                                                                Š
                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ₿
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
         2616
                                                                                              2501
                                                                                                                            2496
                                                                                                                                                       2441
                                                                                                                                                                                                                2381
                                                                                                                                                                                                                                                                          2337
                                                                                                                                                                                                                                                                                                                                   2279
                                                                                                                                                                                                                                                                                                      2316
                                                                                                                                                                                                                                                                                                                                                                2256
                                                                                                                                                                                                                                                                                                                                                                                                                                                       2159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2079
                                                                                                                                                                                                                                                                                                                                                                                             2219
                                                                                                                                                                                                                                                                                                                                                                                                                          2196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1943
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1539
CTCAACTTTGTACATCGGGACCTGGCCACGCGGAACTGCCTAGTTGGGGAAAATTTCACC 2675
                                                 TACCCAATGCTGCATGTGGCAGCCCAGATCGCCTCCGGCATGCGCTATCTGGCCACA
                                                                                                                  GACAAGGCAGCCGAGGGGGCCCCTGGGGACGGGCAGGGTTGCGCAGGGGGCCCACCATCAGC
                             TACGCCAACCTGAAGTTTATGGCAACCCAGATTGCCTCTGGTATGAAGTACCTTTCGTCT
                                                                                                                                               ATCACGGAATACATGGAGAATGGAGATCTTAATCAGTTTCTTCTCGCCACGAGCCTCTG
                                                                                                                                                                  ATTACTGACTACATGGAGAACGGCGACCTCAACCAGTTCCTCAGTGCCCACCAGCTGGAG
                                                                                                                                                                                                                           AAGGACCCCAACATCATTCGGCTGCTGGGCGTGTGTGCAGGACGACCCCCTCTGCATG
                                                                                                                                                                                                          AAGGACCCAAACATCATCCGTCTCTTAGCTGTGTGCATCACTGAGGACCCGCTCTGCATG
                                                                                                                                                                                                                                                                                  AGCTTCTCCTTGTTCTCCAGGAATGATTTTCCTGAAAGAGGTGAAGATCATGTCGAGGCTC
                                                                                                                                                                                                                                                                                                                           GCCAACCAGCCTGTCCTGGTGGCCGTGAAAATGCTCCGAGCAGATGCCAACAAGAATG--
                                                                                                                                                                                                                                                                                                                                          CTCTGTGAAGTGGAAGAATGGAAAAATTCAAAGACAAAGATTTTGCACTAGATGTCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                 CTGTGTGAGGTCGACAGCCCTCAAGATCTGGTCAGTCTTGATTTCCCCCCTTAATGTGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                               CCCAGGAAACTGTTGGCCTTCAAGGAGAAGCTGGGAGAAGGCCAGTTTGGGGAGGTTCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCTCGATCTCGACTCCGCTTCAAGGAGAAGCTTGGGGAGGGCCAGTTTGGGGAGGTGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGTGTGCCTGCTGAACCATGGATCTGCTATCGGGGAAAGATGTGGCTGTGGAAGAGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCTGTGCCTGCACTGCCCCAG----GGGCAGTCGGGGATGGGCCCCCCAGAGTGGATTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCCCATTATGCCGAGGCTGACATTGTTACCCTGCAGGGCGTCACCGGGGGGCAACACCTAT 2078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTCAGGGTGCAGTGGTGTTGTGAAGCCGGCC----CAGCCCAATGGACCTGAGGGCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TATATGGAGCCTGAGAAGCCAGGCGCCCCCCCTTCTGCCCCCCACCTCCCCAGAACAGCGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCCCACTATGCAGAAGCCGACATAGTGAATCTCCAGGGAGTGACAGGTGGCAACACCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCGGGCCCCCCACACCCCGCCTGGGCCAAACCCAACACCCAGGCCTACAGTGGGGAC 1958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGATC----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGCTCTCCAATCCAGCCTACCGCCTCCTTCTGGCCACTTACGCCCGTCCCCCCTCGAGGC 1898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCAACTCTACTTATGATCGAATCTTCCCCCCTTCGCCCTGACTACCAGGAGCCATCCAGA 1942
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCCCGGCCTCGTGGGAATCCGCCCCACTCCCTCTCTCTCCCCAATGGCTCTGCGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGCGAGTCCAGCATGTTCAATAACAACCGCTCCTC----ATCACCAAGTGAACAGGAG 1882
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGGGACACTATCCTCATCAACAACCGCCCAGGTCCTAGAGAGCCACCCCCGTACCAGGAG 1778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTAGAAAAGGCTTCACGGAGGATGCTGGATGATGAAATGACAGTCAGCCTTTCCCTGCCC 1828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTCAGCAAGGCTGAACGGAGGGTGTTGGAAGAGGAGCTGACGGTTCACCTCTCTGTCCCT 1718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATCTTCATCCTGCCTATCATCGTCATCCTGTGGAGGCAGTTCTGGCAGAAGATG 1768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATCCTGCTGCTGCTCATCATTGCCCTCATGCTCTGGCGGCTGCACTGGCGCAGGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCCATGCTTAAAGTTGATGATAGCAACACTCGGATCCTGATTGGTTGCTTGGTGGCCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCCGTGGCCAAGGCCGAGGGGAGCCCGACCGCCATCCTCATCGGCTGCCTGGTGGCCATC
                                                                                                                                                                                                                                                                    ------CCAGGAATGATTTTCTTAAGGAGATCAAGATCATGTCTCGGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTTCCTGTTCTAGTGATGCCACAGTCAGT
                                                          2615
                                2590
                                                                                                                    2555
                                                                                        2530
                                                                                                                                                                             2495
                                                                                                                                                                                                          2440
                                                                                                                                                                                                                                       2435
                                                                                                                                                                                                                                                                    2380
                                                                                                                                                                                                                                                                                                                              2336
                                                                                                                                                                                                                                                                                                                                                                                                                                                 2218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2018
                                                                                                                                                                                                                                                                                               2375
                                                                                                                                                                                                                                                                                                                                                                                       2278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1598
```

```
RESULT 13
US-08-237-401A-19
; Sequence 19, Application US/08237401A
patent.No. 5837448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Qy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DЪ
                                                                NAME: Haile Ph.D., Lisa A.
REGISTRATION NUMBER: 38,347
REFERENCE/DOCKET NUMBER: 07251/007001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 678-5070
TELEPAX: (619) 678-5099
INFORMATION FOR SEQ ID NO: 19:
               SEQUENCE CHARACTERISTICS:
LENGTH: 3120 base pair
TYPE: nucleic acid
                                                                                                                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 0:
FILING DATE: 15-MAY-1992
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: PROTEIN-TYROSINE KINASE GENES NUMBER OF SEQUENCES: 54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2891
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2831
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2591
                                                                                                                                                                                                                                                                                                                                                                                                                         ADDAL.
STREET:
CA
T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Lemke Ph.D. et al.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3011 GAAATACACCTCCTGCTTCTTCAGCAAGGAGCCGAGTGATGATGCATCA
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                              COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PatentIn Release #1.0,
                                                                                                                                                                                                                                                    CLASSIFICATION: 435
                                                                                                                                                                                                                                                                APPLICATION NUMBER: FILING DATE: 02-MAN
                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY: US
ZIP.: 92037
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE: Fish & Richardson P.C. STREET: 4225 Executive Square, Suite
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGCTGCATCGGTTCCTGGCAGAGGATGCACTCAACACGGTGTGAATCA 3084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGTATAAGCTGATGCTCAGCTGCAGGAGAAGGAAACCAAGCACCGGCCATCCTTCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTATATGAGCTGATGCTTCGGTGCTGGAGCCGGGAGTCTGAGCAGCGACCACCCTTTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTCTTCCGAGACCAAGGGAGGCAGATCTATCTCCCTCAACCAGCCCTTTGCCCCGACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGCCAGGAGCAGCCCTATTCCCAGCTGTCGGATGAGCAGGTTATCGAGAACACTGGAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTCACGACTGCGAGTGACGTGTGGGCCTTTGGTGTGACCCTGTGGGAGGTGCTGATGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGGGCCGGGCAGTGCTGCCCATCCGCTGGATGGCCTGGGAGTGCATCCTCATGGGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGTAGGGCCCAGCCCTTTGGGCAGCCCCGACGAGCAGGTCATCGAGAACGCGGGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTCACCACGGCAAGTGATGTGTGGGCCTTTGGGGTGACTCTGTGGGAGACCTTCACCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGGGCCGGGCGGTGCTCCCCATTCGCTGGATGTCCTGGGAAAGCATCTTGCTGGGCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATCAAAATCGCAGACTTTGGCATGAGCCGGAACCTCTATGCTGGGGACTATTACCGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATCAAGATAGCTGATTTTGGCATGAGCAGAAACCTGTACAGTGGTGATTACTACCGGATC
                                  3120 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Jolla
                                                                                                                                                                                                                                                                  02-MAY-1994
                                                                                                                                                                                                                                                                                US/08/237,401A
                                                                                                                                                                                                                  07/884,486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Greg
                                                                                                                                                                                                                                                                                                                Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    [F]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1400
                                                                                                                                                                                                                                                                                                                   #
                                                                                                                                                                                                                                                                                                                   .
25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3035
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2770
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2710
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2650
```

FEATURE:

CLONE: Tyro-10

and the second of the second s

```
; NAME/KEY: CDS
; LOCATION: 485..3047
US-08-237-401A-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ouery Match 16.1%; Score 639.8; DB 2; Best Local Similarity 56.5%; Pred. No. 4.5e-142; Matches 1552; Conservative 0; Mismatches 987;
                                                                                      1179
1239 CGTGGCCCTGCCATGGCCTGGGAGGGGGGAGCCCATGCGCCACAACCTAGGGGGCCAACCTG 1298
                                                                                                                       1119 TATGTGGAGATGGAGTTTGAGTTTGACCGGCTGAGGGCCTTCCAGGCTATGCAGGTCCAC 1178
                                                                                                                                                                   1109
                                                                                                                                                                                                                                                                                                                                                                          1049 GATGGCTTGGTATCCTACAATGCTCCAGCTGGACAGCAGTTTGTACTCCCTGGAGGCTCC 1108
                                                                                                                                                                                                                                                                                                                                                                                                 885 GATGGACTCCTGTCTTACACCGCCCCTGTGGGGCAGACAATGTATTTATCTGAGG----- 939
                                                                                                                                                                                                                                                                                                                                                                                                                                           825 CGGGCTGACCGGGTCATGAGTGTCTGTCTGCGGGTAGAGGCTCTATGGCTGCCTCTGGAGG 884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                645 GECCTEGGCAAGGAGTTCTCCCGGAGCTACCGGCTGCGTTACTCCCGGGAATGGTCGCCGC 704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     749 ATTGACTTGCGAACCCTACACTTTATCACTCTTGTGGGGACCCAGGGGCGCCCATGCAGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       585 GTGGATCTACAACGACTCCACCTGGTGGCTCTGGTGGGCACCCAGGGACGGCATGCCGGG 644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      689 GATGGAGCCTGGTGTCCTGAGATTCCAGTGCAACCCGATGACCTGAAGGAATTTCTGCAG 748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               528 GATGGGCCCTGGTGCCCCCGCAGGGTGTTTCCCCAAGGA----GGAGGAGTACTTGCAG 584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         468 TCCAGCTCCTGGTCAGATTCCACTGCCGCCCGCCACAGCAGGTTGGAGGAGGAGGAGGG 527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   408 AAGTGCCGCTATGCCCTGGGCATGCAGGACCGGACCATCCCAGACAGTGACATCTCTGCT 467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           569 ATATGCCGCTATCCTCTGGGCATGTCAGGAGGCCACATTCCAGATGAGGACATCACAGCC 628
                                 TGCAACAACATGTTTGCTAAAGGTGTGAAGATTTTTAAGGAGGTCCAGTGCTACTTTCGC 1405
                                                                    TGTAACAACATGCACACGCTGGGGAGCCCGTCTGCCTGGCGGGGTGGAATGTCGCTTCCGG
                                                                                                                                                                                                                                                         ATCATTTATCTGAATGATTCTGTCTATGATGGAGCTGTTGGGTACAGCATGACTGAAGGG
                                                                                                                                                                                                                                                                                                                                       -CCGTGTACCTCAACGACTCCACCTATGACGGACATACCGTGGGGCGGACTGCAGTATGGG 998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GATGTATTCCTGAAGGACTTGGAGCCACCCATCGTCGCCAGATTTGTTCGCCTTATCCCA 988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGAGTGGTGCTGAAGGACCTTGGGCCCCCATGGTTGCCCGACTGGTTCGCTTCTACCCC 824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGGATCTCCTGGCGTAACCGGCATGGGAAGCAGGTGCTTGATGGAAACAGTAACCCTTAT 928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGGATGGGCTGGAAGGACCGCTGGGGTCAGGAGGTGATCTCAGGCAATGAGGACCCCTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGTCATGGCATTGAATTTGCACCCATGTACAAGATCAACTACAGTCGGGATGGCAGTCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels 210;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 3120;
                                                                                                       1345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                           1168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11;
```

δõ В δõ 밁 δÃ 밁 Š

ş В

밁 Qy DЬ Ş Ъ Ş 밁 Š B Ş 망 Š 밁 δÃ В á В Ş Вþ Ş В Ş

Qy	Db	Qy	ФФ	Qγ	рb	Qy	ф	Qy	Дb	QY	Db	Qy	Дb	Qy	Db	Qy	Db	Qy	Ъ	Qy	Db.	Qy	ДD	Qy	ДЬ	Qy	Db -	ογ	da I	ογ	ДD	γQ	ДD	VΩ	문
2316 AC	2279 G	2256 A	219 d	2196 C	2159 C	2136 C	2099 T	2079 G	2039 0	2019 C	1984 0	1959 1	1949 -	1899 (1943 (1839	1883	1779	1829	1719	1769	1659	1709	1599	64	1539	62	47	58	1419	1523	. 1359	1463		1406
GCTTCTCC	CCAACCAC	AAGGGACA	TCTGTGAAGTGGAGGAA	TGTGTGA	CCAGGAAA	сстсбатс	TGTGTGCCTGCTGTAACCA	CTGTGCC	CCCACTATGCAGAAGCCGACATAG	CCCATTA		PATATGG		cceeecco	•	CTGCTCT	TCCAACT	cccccc	AGCGAGT	GGGGACA	CTAGAAA	CTCAGCA	ATCTTCA	тсстс	CCCATGO	ссете		СССССТС	GATGCTGC	GATGTG	AAGTGC	CAGTGO	 GTGAAC	GGGGAC	TCGG
TIGTIC	CAGCCTGTCCT	CCTTTG	AGTGGAG	GGTCGAC,	CIGI	TCGACTO	TGCTGTA	TGCACTG	TGCAGAA	TGCCGAG	GCAGTGG	GCCTGAG		CCCCAC		TCCAATCC	CTACTTA	CTCGTGG	CCAGCAT	CTATCCT	AGGCTTC	AGGCTGA	TCTTCATCCTGCTGCT	TCCTGCT	III I	CCAAGG		ຄ	GATGCTGCAATGTATAACAA	STOR ACT	CAATACC	CGCTTCC	CCCAGIG	CCCAGAG	•
TCCAGGA	TEGTEGCCGTG		GAATGG.	AGCCCTC	GCCTTCA	CGCTTCA	G	S	GCCGACA	GCTGACA	TGTTGTO	AAGCCAG	:	Acccccc		AGCCTAC	IIII IGATCGA	GAATCCG	GTTCAAT	CATCAAC	ACGGAGG	ACGGAGG	GGCTATC	GCTCATO	TGATGAT	Japan Andre	- 6	C TO TO TO	AATGTATAACAACTC		ATTTTGC	TCTTTGC	CCCGGTT	cccaaa	GCGAGTG
CAGGAATGATTTCCTGAAAGAGGTG	CGTGAA	CTGTCAAC	AATGGAAAAATT	AAGATOT	TGGCCTTCAAGGAGAAGCTGGGAGAAGGCCAGTTTGGGG	AGGAGAA		;	TAGTGAA	TTGTTAC		3000000	CGAAAG	CGCCTGGGCCAAACCCACCAAC		CAGCCTACCGCCTCCTTCTGGCC	CCAACTCTACTTATGATCGAATCTTCCCCCTTCGCCCTGACTAC	CCCACT	AGCGAGTCCAGCATGTTCAATAACAACCGCTCCTCATC	AACCGCC	CTAGAAAAGGCTTCACGGAGGATGCTGGATGATGAAATGACAGTCAGCCTT	GTGTTGG		ATTGCCC	CTTAAAGTTGATGATAGCAACACTCGG	SACOCOC S		3 6	36			GGGGCCC	THE PROPERTY OF THE PROPERTY O	TGTCTC A	
CTGAAAG		SATCTTAC	CIGGICAGICTIGATTI 		CTGGGA	GCTTGGC	I III	AGTCGGG	TGAATCTCCAGGAGTG	**	; G–	_	AGCTTCC	VACCCACO		rrcreece	CCTTCG	CCCTCC	GCTCCTC	CAGGTCC	 ATGATGA	AAGAGGA	<u>0</u> –	TCATGCT	CTCGGAI		AGCAGCT	1	<u>ຄ</u>		TGGATGA	TGGTTAC:	61600000	Carocaca Services	ア レルなどよい
AGGTGAA	\sim	Ċ.	TIGATT AAGATTT		II IIII	GAGGGCC	ă-	GATGGGC	II II I	GGCGTCA	I. II I	CCCCAC	AGAGTTI	AACACCC		CACTTACGCC	CCTGACTACCA	CIGIGIC	A	TAGAGAG	AATGACA	GCTGACG	ATCCTGTGGAGGCA	CTGGCGG	CCTGATT		GGAG	CACCIC	AGGCACCTT	TOTICAG			TCCACCA	TCTACT.	
GAAGATCATGT	ATGCCAAC	i e	100 100 100 100 100 100 100 100 100 100		AGTTTGG	AGTTTGG	AAGATGTGGCTGTGGAAG	CCCCCAG		cceeee	ATGGACC	Ž :		AGGCCTA	:	CCCGTCC	TACCAGGAGCC	CCCAATG		CCACCCC	FICAGCC	GTTCACC	GTTC	CTGCACT		SOCIAL COL	-TGGAGCCCAGA	TCTCCTA	```	COMOMIC			CCGAATG	TOCCTG	
TCGAGGCT	AAGAATG	5 7	CCTTAATGTGC ACTAGATGTCA			AGGTG	GAG - 1	АСТССАТ	ACACC	ACACO	6 - 6	GAACAGO	GAGAG	i i	:	CCCTCG	5-6	<u> </u>	GTGAACAG	ACCCCGTACCAG		かしかしかじむ	GCAC	3		ACCI	် ရုံ		G	VOLUE LOS			TeeCreering	GICCIGG	
237	233	3 1	GT 225 GT 227	12.4.2.1		CAC 21		3 !	AC 2	PAT 2	 CGTG 2038) ;	- CEA 19	10 10	٠. د	GGC 18	AGA 19	TTG 1	111 111 111 111 111 111	ב מנב	18 - C) -	AAGATG 17	3 6	CATC 1	JAT 1	CAG 1		crec 1	TCA 1			3 – 13 - 13	AT	
Ui	ס נ	л (= ŭi		o i		ži č	ñ i	98 6	78	w F		מ כ	л 4	Ď	98	ت م		38.2	3 1	128		ດ ປ	n c	598			628	47	582	4.	ز	ກ່ພ	6	;

```
Sequence 4, Application US/08286305A
Patent No. 5766863
GENERAL INFORMATION:
APPLICANT: Godowski, Paul J.
APPLICANT: Mark, Melanie R.
APPLICANT: Sadick, Michael D.
APPLICANT: Shelton, David L.
APPLICANT: Wong, Wai Lee Tan
                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     늉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                             US-08-286-305A-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
COMPUTER READABLE FORM:
MEDIUM TYPE: 5.25 inch, 360 Kb floppy disk
COMPUTER: IBM PC compatible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2891
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2831
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2441
                                                                                                                             CORRESPONDENCE ADDRESS
                                                                                                                                              TITLE OF INVENTION: KINASE RECEPTOR ACTIVATION ASSAY NUMBER OF SEQUENCES: 11
                                                                                                                                                                                                                                                                                                                                                     3011 GAAATACACCTCCTGCTTCTTCAGCAAGGAGCCGAGTGATGATGCATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2736 CAGGGCCGGGCAGTGCTGCCCATCCGCTGGATGGCCTTGGGAGTGCATCCTCATGGGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2376
                                                                                                                                                                                                                                                                                                                                                                               3036 CAGCTGCATCGGTTCCTGGCAGAGGATGCACTCAACACGGTGTGAATCA 3084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2337
                                                                                         STREET:
CITY: S
                                                            STATE: C
                                                                                                                      ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                          CTATATGAGCTGATGCTTCGGTGCTGGAGCCGGGAGTCTGAGCAGCGACCACCCTTTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGCCAGGAGCAGCCCTATTCCCAGCTGTCGGATGAGCAGGTTATCGAGAACACTGGAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGTAGGGCCCAGCCCTTTGGGCAGCTCACCGACGAGCAGGTCATCGAGAACGCGGGGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTCACGACTGCGAGTGACGTGTGGGCCTTTGGTGACCCTGTGGGAGGTGCTGATGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATCAAAATCGCAGACTTTGGCATGAGCCGGAACCTCTATGCTGGGGACTATTACCGTGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTCAACTTTGTACATCGGGACCTGGCCACGCGGAACTGCCCTAGTTGGGGAAAAATTTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A ------GTTCCTGTTCTAGTGATGCCACAGTCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATCACGGAATACATGGAGAATGGAGATCTTAATCAGTTTCTTCTCGCCACGAGCCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTCTTCCGAGACCAAGGGAGGCAGATCTATCTCCCTCAACCAGCCCTTTGCCCCGACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGGGCCGGGCGTGCTCCCCATTCGCTGGATGTCCTGGGAAAGCATCTTGCTGGGCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATCAAGATAGCTGATTTTGGCATGAGCAGAAACCTGTACAGTGGTGATTACTACCGGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTCAACTTTGTCCACCGAGATCTGGCCACACGAAACTGTTTAGTGGGCAAGAATTACACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GACAAGGCAGCCGAGGGGCCCCTGGGGACGGGCAGGCTGCGCAGGGGGCCCACCATCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAGGACCCAAACATCATCCGTCTCTTAGCTGTGCATCACTGAGGACCCGCTCTGCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAGGACCCCAACATCATTCGGCTGCTGGGCGTGTGTGTGCAGGACGACCCCCTCTGCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTCACCACGGCAAGTGATGTGGGGCCTTTGGGGTGACTCTGTGGGAGACCTTCACCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTACTGACTACATGGAGAACGGCGACCTCAACCAGTTCCTCAGTGCCCACCAGCTGGAG
                                                 94080
                                                               T: 460 Point San Bruno Blvd
South San Francisco
: California
lY: msa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -CCAGGAATGATTTTCTTAAGGAGATCAAGATCATGTCTCGGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                          3035
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2770
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2380
                                                                                                                                                                                                                                                                                                                                                                                                             3010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2710
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2435
```

```
밁
                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                      Q
                                                                                                                                           밁
                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                        B
                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                     망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-08-286-305A-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEX: 910/371-7168
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 2820 basconyrops
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 348; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 08/170558
FILING DATE: 20-DEC-1993
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/157563
FILING DATE: 23-NOV-1993
ATTORNEY_AGENT INFORMATION:
NAME: Lee, Wendy M.
                                                                                                                                           2402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELECOMMUNICATION INFORMATION:
TELEPHONE: 415/225-1994
TELEFAX: 415/952-9881
                                                                                                       2802
                                                                                                                                                                              2742
                                                                                                                                                                                                                                                    2682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1994 TCCGAGAGTGCTCGGCAGGACTTCCAACGTGAGGCTGAGCTGCTCACCATGCTGCAGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2322 TCCTTGTTCTCCAGGAATGATTTCCTGAAAGAGGTGAAGATCATGTCGAGGCTCAAGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: patin (Genen CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                           2222 CAGCTGCTGGCCGTGGCTAGCCAGGTCGCTGCGGGGATGGTGTACCTGGCGGGTCTGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRANDEDNESS:
TOPOLOGY: 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: FILING DATE: 05-AUG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OPERATING SYSTEM:
                      GCCCAGCCCTTTGGGCAGCACCTCACCGACGACGAGCAGGTCATCGA 2902
                                                                                                                                                            CGGGCAGTGCTGCCCATCCGCTGGATGGCCTGGGAGTGCATCCTCATGGGGAAGTTCACG
                                                                                                                                                                                                                                   ATCGCAGACTTTTGGCATGAGCCGGAACCTCTATGCTGGGGACTATTACCGTGTGCAGGGC
                                                                                                                                                                                                                                                                                                           TTTGTACATCGGGACCTGGCCACGCGGAACTGCCTAGTTGGGGAAAATTTCACCATCAAA
                                                                                                                                                                                                                                                                                                                                                                                ATGCTGCTGCATGTGGCAGCCCAGATCGCCTCCGGCATGCGCCTATCTGGCCACACTCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCCAACATCATTCGGCTGCTGGGCGTGTGTGTGCAGGACGACCCCCTCTGCATGATTACT
--- CAGCCCTGGTACCAGCTCTCCAACACGGAGGCAATCGA
                                                                   ACTGCGAGTGACGTGTGGGCCTTTGGTGTGACCCTGTGGGAGGTGCTGATGCTCTGTAGG
                                                                                                                                           CGCACCATGCTGCCCATTCGCTGGATGCCGCCCGAGAGCATCCTGTACCGTAAGTTCACC
                                                                                                                                                                                                                ATTGGTGATTTTGGCATGAGCAGGGATATCTACAGCACCGACTATTACCGTGTGGGAGGC
                                                                                                                                                                                                                                                                                        TTTGTGCACCGGGACCTGGCCACACGCAACTGTCTAGTGGGCCAGGGACTGGTGGTCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                   -----GCTGCTGGCTGGGGGGGGGAGGATGTGGCTCCAGGCCCCCTGGGTCTGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCAGCCGAGGGGCCCCTGGGGACGGGCAGGGGCCCACCATCAGCTACCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGTATATGCGGCACGGGGACCTCAACCGCTTCCTCCGATCCCATGGACCTGATGCCAA-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       nucleic acid
DEDNESS: double
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (Genentech)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US/08/286,305A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      00,000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 182.2; 1
Pred. No. 7.9e
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         854C1P1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2; DB 1;
7.9e-34;
hes 218;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15;
```

Gaps

2;

2381

2861

2521

2801

2741 2401

2461

2281 2681

2341

2561 2221

2621

2053 2441 2113

```
δõ
                                                            밁
                                                                                          ŽQ
                                                                                                                            ₽
                                                                                                                                                             ρ
                                                                                                                                                                                                 Дb
                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: 415/952-9881
TELEX: 910/371-7168
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 2820 bassa
                                                                                                                                                                                                                                                                                   Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 4, Application US/08441104A Patent No. 5891650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -08-441-104A-4
                                               2114 GAGTATATGCGGCACGGGGACCTCAACCGCTTCCTCCGATCCCATGGACCTGATGCCAA- 2172
                                                                                                                                                               2382
                                                                                                                                                                                                            2322 TCCTTGTTCTCCAGGAATGATTTCCTGAAAGAGGTGAAGATCATGTCGAGGCTCAAGGAC 2381
2502 GCAGCCGAGGGGCCCCTGGGGACGGGAGGGAGGGGGCCCACCATCAGCTACCCA 2561
                                                                                                                 2054 CAGCACATCGTGCGCTTCTTCGGCGTCTGCACCGAGGGCCGCCCCCCTGCTCATGGTCTTT 2113
                                                                                                                                                                                    1994 TCCGAGAGTGCTCGGCAGGACTTCCAACGTGAGGCTGAGCTGCTCACCATGCTGCAGCAC 2053
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ZIP: YAUU COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5 inch, 720 Kb floppy disk

COMPUTER: IBM PC compatible

COMPUTER: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REGISTRATION NUMBER: 00,000
REFERENCE/DOCKET NUMBER: 854C1P1C2
REFERENCE/DOCKET NUMBER: 854C1P1C2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                             Local Similarity 59.9 nes 348; Conservative
                                                                                                                                                                                                                                                                                                                                                                                      STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Lee, Wendy M. REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 08/157563 FILING DATE: 23-NOV-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 08/2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                        CCCAACATCATTCGGCTGGGCGTGTGTGTGTGGAGGACCGCCCCTCTGCATGATTACT 2441
                                                                                 GACTACATGGAGAACGGCGACCTCAACCAGTTCCTCAGTGCCCACCAGCTGGAGGACAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                  nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEE: Genentech, Inc.
1: 460 Point San Brund Blvd
South San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mark, Melanie R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Godowski, Paul J.
                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sadick, Michael D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            UMBER: 08/170558
20-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                UMBER: US/08/441,104A
15-MAY-1995
                                                                                                                                                                                                                                                                                                                                                                                    double
                                                                                                                                                                                                                                                                        4.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KINASE RECEPTOR ACTIVATION ASSAY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             David L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              08/286305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Lee Tan
                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                        Score 182.2; DB 2;
Pred. No. 7.9e-34;
0; Mismatches 218;
                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                          Length 2820;
                                                                                                                                                                                                                                                          15;
                                                                                                                                                                                                                                                    Gaps
                                                                                   2501
```

```
뮹
                                                                                                                                 Ş
                                                                                                                                                                            B
                                                                                                                                                                                                              Š
                                                                                                                                                                                                                                                              닭
                                                                                                                                                                                                                                                                                                  Qγ
                                                                                                                                                                                                                                                                                                                                                                                  õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    õ
2522 --- CAGCCCTGGTACCAGCTCTCCAACACGGAGGCAATCGA 2559
                                                                                          2462
                                                                                                                                                                            2402
                                                                                                                                                                                                                   2742
                                                                                                                                                                                                                                                            2342
                                                                                                                                                                                                                                                                                                     2682
                                                                                                                                                                                                                                                                                                                                                                                       2622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2173
                                                                                                                                                                                                                                                                                                                                                2282
                                                                                                                                                                                                                                                                                                                                                                                                                                                       2562 ATGCTGCTGCATGTGGCAGCCCAGATCGCCTCCGGCATGCGCCTATCTGGCCACACTCAAC 2621
                                      GCCCAGCCCTTTGGGCAGCTCACCGACGAGCAGGTCATCGA 2902
                                                                                                                                                                                                      CGGGCAGTGCTGCCCATCCGCTGGATGGCCTGGGAGTGCATCCTCATGGGGAAGTTCACG
                                                                                                                                                                                                                                                                                        ATCGCAGACTTTGGCATGAGCCGGAACCTCTATGCTGGGGGACTATTACCGTGTGCAGGGC
                                                                             ACCGAGAGCGACGTGTGGAGCTTCGGCGTGGTGCTCTGGGAGATCTTCACCTACGGCAAG 2521
                                                                                                                      ACTGCGAGTGACGTGTGGGCCTTTGGTGTGACCCTGTGGGAGGTGCTGATGCTCTGTAGG 2861
                                                                                                                                                             CGCACCATGCTGCCTTGGATGCCGCCCGAGAGCATCCTGTACCGTAAGTTCACC 2461
                                                                                                                                                                                                                                                 ATTGGTGATTTTGGCATGAGCAGGGATATCTACAGCACCGACTATTACCGTGTGGGAGGC
                                                                                                                                                                                                                                                                                                                                 TTTGTGCACCGGGACCTGGCCACACGCAACTGTCTAGTGGGCCAGGGACTGGTGGTCAAG
                                                                                                                                                                                                                                                                                                                                                                       TTTGTACATCGGGACCTGGCCACGCGGAACTGCCTAGTTGGGGAAAATTTCACCATCAAA 2681
                                                                                                                                                                                                                                                                                                                                                                                                                   CAGCTGCTGGCCGTGGCTAGCCAGGTCGCTGCGGGGATGGTGTACCTGGCGGGTCTGCAT 2281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ----GCTGCTGGCTGGGGGAGGATGTGGCTCCAGGCCCCCTGGGTCTGGGG
                                                                                                                                                                                                        2801
                                                                                                                                                                                                                                                 2401
                                                                                                                                                                                                                                                                                          2741
                                                                                                                                                                                                                                                                                                                                   2341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2221
```

Search completed: December 8, 2001, 21:00:30 Job time: 4924 sec